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TRIGONOMETRIA

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TRIGONOMETRIA
PLANA, ET SPHÆRICA,
Linearis, & Logarithmica.
HOC EST

Tam per Sinuum, Tangentium, & Secantium multiplicationem, ac diuisionem iuxta Veteres:

Quam per Logarithmorum simplicem ferè additionem iuxta Recentiores;

Ad Triangulorum dimetiendos angulos, & latera procedens.

Cum Canone duplici Trigonometrico, & Chiliade Numerorum absolutorum ab 1 *vsque ad* 1000, *eorumque Logarithmis, ac differentijs.*

Opusculum Vniuersæ Mathesi vtilissimum:

Omniumq; terrestrium, ac cælestium dimensionum Promptuarium.

AVCTORE FR. BONAVENTVRA CAVALERIO MEDIOLANENSI,

Ordinis Iesuatorum Sancti Hieronymi:

Ac in Almo Bononiensi Gymnasio Primario Mathematicarum Professore.

BONONIÆ, Typis Hæredis Victorij Benatij. 1643. *Superiorum permissu.*

ILLVSTRISSIMO DOMINO D. COM. ALEXANDRO BENTIVOLO

Patrono maximè Colendo.

Elitescebat in tenebris hæc ingloria lucubratio Adm. R. P. Bonauenturæ Cauallerij, eruditissimi, ac solertissimi viri, in Bononien. Archigymnasio Mathematicarum artium professoris, quam cum mundo luculentam exhibere operæ pretium esset, Auctori renuenti suffurari statueram, ne suo, suiq; conditoris splendore careret; etenim celata virtus latere nescit Lyrico teste, & dignum laude virum musa vetat mori: ille tamen iocosi furti præscius, & meæ voluntatis non ignarus hoc me gratissimo munere affecit. Enim verò quid mihi iucundius contingere poterat, quam per op-

portuna facultas Alexandri illius colendi, cuius si nomen perpendas HOMINIS AVXILIVM *referas, sin facta, virum Alexandri Seueri Imperatoris munificentiæ prodigij vestigia imitantem intuearis, & Magni Alexandri liberalitatis oraculi æmulantem opera fateare? Silere mihi liceat generis claritatem, ac Familiæ excellentiam vbique celeberrimam, siquidem Ouidij sententia.*

Et genus, & proauos, & quæ non fecimus ipsi,
Vix ea nostra voco &c.

Prodit ergò hoc Opusculum plurimis tibi nominibus debitum, præcipuè vero ob innumera tua erga me merita, quorum obliuionem capere non nisi sine summa ingrati animi nota liceret. Excipe igitur Illustriß. Com. deuotam hanc animi mei alacritatem, ac obsequium, memoriaq; recole non minus esse Regium paruula accipere, quam largiri magna. Perge quoq; de me, meaq; Religione, vti soles bene mereri, quæ & tibi, & Familiæ tuæ à celesti benignitate omnia bona studiosissimè deprecari non desinit. Diutissimè Vale.

Bonon. Die 18. *Mensis Aprilis* 1643.

Illustriss. Dominationis tuæ

Addictiss. Seruus
Fr. Sigismundus Pellegrius
Ord. Iesuatorum.

PRÆFATIO.

CVm plures ex discipulis, & amicis meis, quibus præcipuè cælestium luminum dium Vrania inspirauit amorem; Trigonometriæ studium aggressi; Tabulas nedum Logarithmorum, sed & Sinuum, Tangentium, & Secantium, tanquam primigenias, experiri summoperè exoptarent: pauca verò earum Exemplaria hic habeantur: omnium votis postulabatur, vt in commune eorum commodum (quod alibi toties factum est) & in hac Alma Studiorum Matre imprimerentur. Vt ergo communi eorum voluntati pro meo munere satisfieret, easdem simul cum Logarithmicis, sub hac forma concinnatas iam vt publici iuris fierent destinaueram, non parum ad hoc & huiusmodi typorum elegantia alliciente. Cum verò præsens Opusculum non ita pridem discipulis meis tradidissem, vt vtramq; calculandi methodum, nempè nedum per Logarithmos, sed & per Sinus, Tangentes, & Secantes, summariamq; totius Trigonometriæ doctrinam in eodem, tanquam in quodam Enchyridio collectam, in promptu haberent: hoc vt eisdem Tabulis (ne ipsæ nudæ in lucem exirent) præmitteretur enixè flagitarunt. At cum circa hoc doctrinæ genus & Directorium, & Praxim Astrologicam, cum eius Appendice pro Directionibus per Logarithmos conficiendis, Problematum Centuriam, ac Compendium Trigonometricarum Regularū per Logarithmos (quæ quatuor Opuscula in vno volumine colligantur) iam in publicam vtilitatem protulissem, ne actum agere, seu per eandem lineam ferram reciprocare viderer, aliud quidquam superaddere superfluum dijudicabam. Verum cum in ipso Directorio quamplurimos errores, propter iniquam temporis conditionem, quo impressum est, nempè hic pestilentia grassante, irrepsisse: reliqua verò Opuscula tantum Regulas Logarithmicas exhibere considerarem (vt quod hic nouum inueniet Studiosus, nunc præteream) idcirco eorum, ac præcipuè P. Sigismundi Pellegrij nostri Ordinis Mathematicarum cultoris (cuius industriæ, ac diligentiæ circa illius emendatam, quantum potuit, impressionem impensæ non parum debebit Lector) precibus flexus, hoc vt ipsis Tabulis adiungeretur negare non potui. Porrò quanti ipsa Trigonometria sit momenti ad vniuersam Mathesim rectè excolendam satis me in dicti Directorij Præfatione explicasse puto, vt non sint ibi fusius dicta hic denuò repetenda. Hoc vnum verò Studiosis in memoriam reuocare sufficiat nihil ferè esse in Astronomia, Geographia, Gnomonica, Altimetria, Perspectiua, Architectura tam Ciuili, quam Militari, alijsq; non paucis Mathematicarum Scientiarum riuulis, quod ex Trigonometria tāquam ex vberrimo fonte non deriuetur. Ita vt quemadmodum Dialectica ad Physicas disciplinas, & ad leges Instituta, sic ad præfata omnia ritè capessenda vnicè Trigonometria nos instruere possit. Hinc mirum non est eruditioribus tanto illam in-

pretio habitam fuiſſe, vt iugiter in eiuſdem cultura ſtrenuè laborauerint. Huic rei illuſtre admodum nobis teſtimonium præbet Aſtronomiæ Principis Almageſtum: non enim alijs lapidibus, quam Trigonometricis tantum Aedificium conſtructum apparet. Hoc idem Copernici Opus de Reuolutionibus Orbium, Tychonis Progymnaſmata, aliorumq; huiuſmodi Virorum monimenta declarant, quorum doctrina non alijs, quam Trigonometriæ filis cernitur contexta. In quorum voluminibus iocundi exercitij occaſionem habebit calculator, ſi huius Opuſculi Regulas eorum Quæſitis applicuerit; quorum magnam illi ſuppellectilem præcipuè Maginus in ſuo Primo Mobili pro exercenda Trigonometria Sphærica ſuppeditabit, in cuius Problematibus conſulo vt de his Regulis, præſertim Logarithmicis, periculum faciat, non enim ſine magna animi oblectatione, & admiratione intelliget, quantò adhibitis ibidem Regulis præſtent Logarithmicæ. Mitto per Trigonometriam difficiliores aliquas, ac inter Philoſophos, & Aſtronomos celebriores Quæſtiones, vt de Parallaxi, ac loco Cometarum, nouorumq; Syderum: de ſitu macularum in Sole: de Lunari aſperitate: de vtriuſque Luminaris Eclipſibus: de Cœli corruptibilitate, vel incorruptibilitate: de huius Vniuerſi genuina partium conſtitutione: deq; alijs ſcitu mirabilibus, quibus ſelectiora tantum ingenia perfruuntur, per vnicam Trigonometriam ritè diſſolui poſſe. Accipe ergo hilari vultu, benigne Lector, præfatis Tabulis adiectum hoc Opuſculum, quantitate paruum; at quod tua cultum induſtria in immenſam molem excreſcere poteſt. Nec enim terreſtribus hiſce cancellis Trigonometria coercetur, ſed altiora petens, & corporis, & mentis oculis viam parat, qua vniuerſa Cœlorum ſpatia, leuioribus, quam Dædalæis pennis ſuffulti Studioſi, peruolare valeant.

ADMONITIO

Circa Auctorem Centrobarycæ.

PRiuſquam autem vlterius procedam, occaſione impreſſionis huius Opuſculi, de quadam re Lectorem hic opportunè præmonendum eſſe duxi, quæ licet ad Trigonometriam non pertineat, nequaquam tamen ſilentio prætereunda eſt, cum ad meæ Geometriæ defenſionem ſpectet, quam octo ab hinc Annis in publicam vtilitatem promulgaui. Cum ergo hæc Trigonometria ad vmbilicum ferè ducta eſſet, apparuit hic Centrobaryca Pauli Guldini è Societate Ieſu, in quatuor Libros diſtributa, quorum primus Anno 1635, tres verò poſteriores Anno 1640 Viennæ Auſtriæ impreſſi fuerunt; materiam continens Centri grauitatis nedum planarum ſuperficierum, & corporum; ſed & non planarum, linearum, atq; punctorum, quibus Antiquorum circa hoc inuenta gloriosè cumulare contendit, cui idcirco

inter eximios Geometriæ cultores promeritas laudes nequaquam denegandas esse fateor. Cum verò prefatos Libros pro temporis angustia auidè perlegerem, Inuentionemq; Centri grauitatis, necnon Vsum, Fructum, & Gloriam eiusdem perlustrarem, plures insimul reperi ab hoc Auctore censoria virga notari. Inter quos præcipuè Albertus Durerus, Dauid Riualtus, Lansbergius, Longomontanus, Keplerus, Vitellio, & quod mirum est ipsi summi Geometriæ Principes Euclides, & Archimedes ennumerantur. Quapropter minimè miratus sum, cum tandem nec memet ab illius districtiori iudicio immunem abire potuisse animaduerti. Quamuis, vt verum fatear, nescio an hunc verum, vel potius fictum, meum Antagonistam apellem. Verum quidem declarant contra meã Arcem geometricam, noua quadam ratione Indiuisibilibus constructã, iacta tela, ictus non pauci ad mœnia concutienda, defossi cuniculi ad illius euertenda fundamenta. At fictum persuadet non indictum apertè bellum, illumque sæpè sæpius protestari, se nihil contra me determinare, vt in sequentibus locis manifestò declarat. In Indice enim rerum præcipuarum Tomi secundi, littera, B, fatetur se meæ Geometriæ septem Libros, quos sibi discutiendos proposuerat, accuratè perlegere non potuisse, vnde nec de illis quidquam statuere. Similiter Pag. 4 de mea methodo Indiuisibilium subiungit. *Eam tamen, propter rationes hic minimè importuno silentio supprimendas, respuendam non censeo.* Pag. 331 pariter hæc habet in parenthesi (*de Caualerij modo hic quicquam decisum volo, rem in aliud tempus, si Deus vitam, ac sanitatem dederit, reseruans*) Et Pag. 349. *Maximè cum hæc inquisitio facta non sit, protestor, ad confundendum, aut supprimendum Auctorem, quem magni facimus &c.* Deniq; Pag. 350 sic concludit. *Sed vt finem tandem desideratum aliquando attingamus, cum bona pace & Archimedis, & Euclidis, quos singulari honore* (si tamen aliqualem censuram excipias) *prosecuti sumus: immò & Pappi Alexandrini, quem præteriuimus, Kepleri etiam, & Caualerij, quos vt amicos tractauimus, huic Libro quarto, & toti Operi de Centro grauitatis finem imponimus.* At, qualiscunque sit hic meus Antagonista, dic quæso, benigne Lector, si rationes in eiusdem Lib. 4 Cap. 5 contra meam nouam Geometriam Indiuisibilibus promotam ab ipso allatæ, ipsummet Auctorem ita conuincere non potuerunt, vt diffinitiuam contra eandem proferret sententiam, illiq; nigrum Theta præfigeret, nunquid hoc apud alios earundem vi obtinere poterit? Sed dices meam doctrinam accuratiori disquisitioni reseruatam fuisse, vt pluribus in locis affirmat, at ab huius posterioris Tomi impressione triennium ferè iam elapsum est (dolui autem per tantum temporis spatium me hunc latuisse) nec quidquam tale adhuc visum fuit. Sed forsan allatis iam ab eo dubitationibus responsum expectat: aut fortè meorum septem Librorum propositiones accuratius perlustrans, nullamq; falsam animaduertens, iudicium, ac sententiam suspendit, ne palinodiam canere, aut talionis pœnam subire cogeretur. Si enim (qualitercunque mea Principia probauerim) conclusiones ab illis deductæ veræ dignoscuntur, quia cum aliorum inuentis, ac minimè dubijs concordant (vt easdem accuratè

examinanti innoteſcet) iam apud hunc Auctorem ſufficienter mea Principia probata erunt, nempè ab inductione. Siquidem hoc ſufficere innuit idem Auctor dum maximum ſuæ Geometriæ fundamentum (quod quidem pulcherrimum eſſe non inficior, locoque dignum, in quo natum eſt: quid enim aliud ab Heſperidum Hortis, quam Mala aurea expectari poſſunt?) non aliter ipſe probat. Sic enim de eodem inquit Pag. 146. *Neque alia demonſtratione res hæc indiget; ſed ſufficiet per inductionem hoc ipſum ſi non in ſingulis, in pleriſq; ſaltem, quas deſcribemus, ac componemus Poteſtatibus oſtendere, aut certè quod noſtra inuenta, cum alijs aliorum aliter demonſtratis præcisè conueniant, innuere, vel tacitè etiam periti Geometræ iudicio id relinquere:* Genuina meherclè, etiam ſi alia non ſuppeteret, pro mei defenſione reſponſio; cur enim meæ Geometriæ ea denegabit priuilegia, quibus ipſe vtitur in ſua? cur non vtræque eadem trutina penſandæ erunt? Cur legem non patietur, quam ipſe tulerit? Sed hæc obiter, & quaſi per tranſennam, ac pro futura reſponſione præludij loco à me nunc dicta ſint. Interim ipſum Auctorem rogo, vt accuratius meos Libros videat, namque poſterioribus melioribus, forſan antica excluſum, poſtica recipiet. Sua quoque diligentiori examine iterum perluſtrare dignetur, etſi enim ad Ariſtophanis, & Cleanthis lucernam elaborata agnoſcantur, nec tamen in eo aliquod videtur deeſſe aliquali cenſura dignum, vt ſuo loco clarius oſtendetur. Denique allatis ab eo dubitationibus, necnon & ijs, quæ in accuratiori diſquiſitione reſeruantur (ſi quamprimum & ipſæ venient) reſponſionem, candide Lector, expecta.

Index Definitionum, Axiomatum, & Problematum, quæ in vtraque Trigonometria continentur.

IN TRIGONOMETRIA PLANA.

Pag.

Definitiones, ac Principia vniuersæ Trigonometriæ communia. 1

Considerationes, & operationes quædam, præcipuè circa Regulam Trium, tam per Lineas, quam per Logarithmos exercendam, summè adnotandæ. 3

Problema 1. *Dati arcus, vel anguli Sinum, Tan. Sec. &c. vel Log. Mes. &c. è Canone extrahere.* 7

Prob. 2. *Dati Sinus, vel Tan. &c. seu Log. Mes. &c. arcum, aut angulum in eodem Canone inuenire.* 8

Prob. 3. *Dati Numeri absoluti Logarithmum è Chiliade excerpere.* 8

Prob. 4. *Dati Logarithmi Numerum absolutum in eadem Chiliade inuenire.* 10

Prob. 5. *Regulam Trium absoluere.* 10

Axioma primum Planorum Lineare. 12

Prob. 6. *In quocunq; Triangulo rectangulo, datis angulis, laterum proportiones manifestare.* 13

Prob. 7. *In quocunq; Triangulo rectangulo, dato præter angulos vnico latere in quauis supposita mensura, in eadem reliqua duo ignota latera nota reddere.* 14

Prob. 8. *In quocunq; Triangulo rectangulo, datis duobus quibuscunq; lateribus in quauis mensura, angulos, & subinde tertium latus in eadem mensura notificare.* 15

Axioma secundum Planorum Lineare. 17

Prob. 9. *In Triangulis planis vniuersis, datis duobus cruribus, & angulo vni eorum opposito, ac data specie anguli reliquo datorum oppositi, hunc notum reddere, necnon angulum verticalem, & basim.* 17

Prob. 10. *In Triangulis planis vniuersis datis duobus angulis, & crure vni eorum opposito, reliqua notificare.* 18

Axioma tertium Planorum Lineare. 18

Prob. 11. *In Triangulis planis vniuersis, datis duobus cruribus, & angulo verticali, angulos ad basim patefacere, & subinde etiam ipsam basim.* 19
Axioma quartum Planorum Lineare. 20
Prob. 12. *In Triangulis planis vniuersis, datis cruribus, & angulo verticali, basim absq; angulorum eidem adiacentium notitia, inuenire.* 20
Axioma quintum Planorum Lineare. 21
Prob. 13. *In Triangulis planis vniuersis, datis tribus lateribus, angulos patefacere.* 21
Prob. 14. *In Triangulis planis vniuersis, datis tribus lateribus, angulos, absq; reductione ad rectangula, notificare.* 22
Prob. 15. *Omnia de Triangulis obliquangulis præcedentia Problemata per reductionem ad rectangula absoluere: hoc est per solum Axioma primum.* 23
Axioma primum Planorum Logarithmicum. 24
Axioma secundum Planorum Logarithmicum. 25
Axioma tertium Planorum Logarithmicum. 25
Prob. 16. *Omnia pro triangulis planis rectangulis, & obliquangulis præcedentia Problemata tantum per regulam, & circinum absoluere.* 26

IN TRIGONOMETRIA SPHÆRICA.

Pag.

Definitiones, ac Principia. 29
Axioma primum Lineare, Triangulis sphæricis rectangulis inseruiens. 32
Problema 1. *In triangulis sphæricis rectangulis, datis, vltra angulum rectum, duobus quibuscunque; reliqua patefacere.* 32
Axioma secundum sphæricorum Lineare, & Logarithmicum pro Rectangulis. 33
Axioma tertium sphæricorum Lineare, & Logarithmicum; ac tam rectangulis, quam obliquangulis commune. 35
Prob. 2. *In triangulis sphæricis obliquangulis, datis duobus cruribus, & angulo vni opposito, nota insuper specie anguli reliquo cruri oppositi (cum hic opponitur cruri, quod est propinquius quadranti) reliqua patefacere.* 36
Prob. 3. *In ijsdem, datis duobus angulis, & crure vni eorum opposito, nota*

insuper specie cruris reliquo datorum oppositi (cum hoc opponitur angulo, qui est propior quadranti) reliqua patefacere. 37
Axioma quartum sphæricorum Lineare. 37
Prob. 4. *In triangulis sphæricis obliquangulis, datis cruribus cum angulo verticali, basim inuenire.* 39
Prob. 5. *In triangulis sphæricis obliquangulis, datis cruribus, cum angulo verticali, reliquos angulos inuenire.* 41
Prob. 6. *In triangulis sphæricis obliquangulis, data basi, cum duobus angulis adiacentibus, angulum verticalem notum facere.* 43
Prob. 7. *In triangulis sphæricis obliquangulis, data base, cum duobus angulis eidem adiacentibus; vtrumuis crurum inuenire.* 46
Prob. 8. *In triangulis sphæricis obliquangulis, datis tribus lateribus, seu datis cruribus, & basi, angulum verticalem inuenire.* 47
Prob. 9. *In triangulis sphæricis obliquangulis, datis tribus angulis, seu angulo verticali, & duobus basi adiacentibus: ipsam basim inuenire.* 52
Prob. 10. *Rationem reddere illius modi inueniendi ad datam Poli eleuationem Circulum positionis Significatoris, extra angulos Figuræ cælestis constituti; quem attuli in Appendice Praxis Astrologicæ pro Directionibus conficiendis Cap.* 4. 54
Applicatio prædictorum Circuli positionis inuentioni. 56
Epilogus Regularum vniuersæ Trigonometriæ, tam per Lineas, quam per Logarithmos. 60
Figuræ pro vtraq; Trigonometria in fine positæ.

INDICIS FINIS.

D. O. M.

Doctrinarum Perfectæ Dyadi,
Totius ſcilicet humanæ Intelligibilitatis Intelligentiæ
TRIGONOMETRICÆ FACVLTATI
Hæ paginæ Sacræ ſunto.
Illius numeroſa ſerie non ſerò, ſed ſeriò
Atq; varia in inclinatione non vltra, nec citra rectum
Lector
Immenſa cœlorum ſpatia arctiſſimè complecti,
Punctalemq; latiſſimè ſpatiari per tellurem
Ter, ſimul & vnicè valebis.
Tantoq; ſcientialis maieſtatis ſummis ab Apicibus,
Apollineo ceu è Tripode
Cunctiſcius euades:
Non alia, Aedepol, quam angulari hac minime ſalebroſa via
Ad impenetrabilitatem vſq; peruenies,
Quinimmò ſolis inuictiſſimis Mathematum inſtructus argumentis
Monſtroſam falſi gigantomachiam tutiſſimè ſuperabis.
Huc ergò mentem animumq; ſtudioſè aduortas.
Et dona ampla feres, queis grates mox gratus ingentiſſimas
Doctiſſimo & Eruditiſſimo Patri Bonauenturæ Cauallerio Archigymnaſij Bonon. Profeſſori
Eminenti Mathematicorum Coryphæo Ingenuitatis Genio,
Scientifici laboris ingenio.
Qui
Altiſſimum aſcenſum incredibili facilitate complanauit,
Extremos terminos admirabiliſſimè conciliauit,
Omniaq; pulcherrima tractabilitate abſolutiſſimè compleuit,
Referes ſemper.
Papyraceus hic Lapis,
Ceu verius Ouidius Mont'Albanus Philoſophorum, & Mathematicorum
Minimus ſcientialem in ſtuporem erga tanti ſapientis
Merita verſus
Tibei
Perpetuas haſce excitatorias ad virtutem notas immobiliter exhibet.
Vale.

Vni
Trino
Numini.
Eximio viro
Bonaventuræ
Cavallerio Matheseos
In florentissimo Bononiæ
Archigymnasio Primario
Professori, omnium consensu
Doctorum subtilissimo, & admirando:
Ter docto: Ter acuto: Ter maximo
Logarithmicis Tabulis doctrinam Trigonometricam,
Sapientissima in sæculum liberalitate, profundenti:
Disce, Lector, solo Trigono laudes infinitas Cavallerij metiri;
Solo enim Trigono infinitum commensurabile novit humanitas.
Disce tot glorias illi debitas esse, quot numeros Doctrina Logarithmica
In suis fine carétibus, ac abditis in immensitatis Chaos recessibus cõplectitur
Illius igitur Famæ, solo Trino venerabili, Trinã hanc Pyramidẽ gratulabundus P.
Virbius Tronchius.

Excellentissimo Trigonometriæ Auctori.

HEXASTICON.

TElluris quicunq; cupis, Cœliuè rescire
Quæque, Cauallerius te docet arte noua.

Qui ex vno Trinoq; Deo sibi Trigona sumpsit,
Quidni mensuret plasmata cuncta Dei?

Trimetra quòd tantum diuinus sciuerit Auctor,
Olli Trina laus, sitq; Corona Triplex.

C. B. I. P.

De Trigonometria Adm. R. P. F. Bonauentura Cauallerij Primarij Matheſeos Profeſſoris in Almo Bononienſi Archigymnaſio.

QVid valeat, Lector, quæris ſi docta Matheſis,
Hunc librum ſpectes: omnia Trinus habet.
Seu luſtrare velis cœleſtes Aſtra per orbes,
Cum gradibuſq; Domos: omnia Trinus habet.
Aut cupias altos, feriunt qui nubila montes
Metiri immenſos: omnia Trinus habet.
Seu ducenda tibi ſit linea perſpectivæ,
Ritè vt perficias: omnia Trinus habet.
Dædalus aut optes celſas ad ſydera moles
Aedificare novas: omnia Trinus habet.
Mœnia ſeu condas, quæ ſint tutamen ab hoſte,
Marte ciente viros: omnia Trinus habet.
Optica ſeu libeat, ſeu te Geographica ſcire,
Vt doceare modos, omnia Trinus habet.
Iure Cavallerio hæc igitur, qui dogmata traddit,
Si omnia Trinus habet, Gloria trina datur.

Io. Baptiſtæ Capponi Phil. & Med.

CÆSARIS PEDRINI.

GRYPHVS.

MAxima qui numeri deſcribis munera Terni,
Ter ternis numeris ſat numerare nequis.

DEL SIG. OLARCO TIAMO.

S'allude all'Architettura Militare.

GOdi Felsina pur, godi sicura,
Mentre il nouo Archimede,
Ch' in tè ferma la sede
Del gran Siracusan le glorie oscura:
Giusto è ben, che togliendo
Tè da' mortali offese, e sè da Morte,
Se lo vince in saper, lo vinca in sorte.

Dell'Animoso Acc. Gelato.

NOn più questa Terrena, e vasta mole
Vanta vn' immensurabile grandezza:
Non più del Mar la tumida alterezza
La sua profondità celar ci vuole.
I moti suoi non più ci asconde il Sole,
O'l rio Vecchion la stupida lunghezza:
Non più l'humano ardir Gioue disprezza,
Con quei, che lasciar l'ire vnqua non suole.
Non più del Ciel per sconosciuta via
Or nel Boreo Zodiaco, or ne l'Austrino
Stella ò rapidi, ò tardi i passi inuia.
Or che ci mostra vn' huom quasi diuino,
Che, s'iui andasse il guardo, anche potria
Giunger l'Empiro a misurare il Trino.

Errores in Prosa corrigendi: pro quibus citantur initia versuum, seu linearum illius paginæ, in qua reperiuntur.

Pag.	Linea.	Lege.
9	posteriores	prius
9	*cupli*	*Dele* I
9	08633	*ipsius*
11	Hæc	mirè
15	*mus*	*notas*
15	dio,	statue
15	*versus*	*detruncetur*
19	tem	quam
21	lum,	*Dele*, non
23	ctangula	cadente
27	sumenda	capies
33	dam,	quinimmò
36	4 ad	septimam
36	ergo	tertium
38	*Colligitur quintò*	Subiunge, *quod*
40	*Z P*,	*notificati*.

Pag.	Linea.	Lege.
40	*Anguli*	*Z P S*,
40	*Ipsius*	*agnoscet*
41	*vel*	*Ref. Log.* 2
48	9. 14'.	9. 14'. 56",
49	*Casus maior*,	*dimidij*, *S B*, *S P*,
49	*Casus minoris*,	*dimidij*, *S B*, *S P*,
50	*grad.*	80. 47'. 32"
52	*bebis*	*vel per Canonem*
58	*deleta*	*is adiunctus*
59	dare.	quiuis
70	guli:	*Subiunge hic immediatè post duo puncta hæc verba per parentheſim*. (hic si sit minor semiangulo verticali, perpendiculũ cadit intra; sin maior, extra)

Vide dicta in Epilogo Pag. 71 Not. vltimo circa Prob. 10 Trigonometriæ Sphæricæ.

Errata in Canone, & Chiliade, sic corrigenda.

In sinistris faciebus.

Gr. ′ ″	Lege.
0. 33. 30.	*Mes.* 798878. 46
1. 3	*Log.* 816304. 24
1. 38	*Sin.* 2850. 32
2. 14	*Sin.* 3896. 91
3. 48	*Sec.* 100220. 34
6. 4	*Sin.* 10568. 56
6. 32	*Log.* 905607. 06
7. 16	*Sec.* 100809. 69
8. 6	*Log.* 914891. 48
8. 20	*Mes.* 916577. 37
8. 36	*Tang.* 15123. 58
9. 28	*Sec.* 101380. 65
9. 31	*Mes.* 922438. 19
10. 31	*Mes.* 926867. 14
11. 26	*Tom.* 1000870. 48
11. 34	*Sin.* 20050. 80
12. 0	*Sin.* 20791. 17
15. 24	*Sin.* 26555. 62
16. 6	*Tom.* 1001737. 64
20. 45	*Tang.* 37889. 61
22. 21	*Mes.* 961400. 00
23. 54	*Mes.* 964654. 00
32. 0	*Log.* 972420. 97
32. 2	*Log.* 972461. 38
35. 37	*Log.* 976519. 11
36. 9	*Mes.* 986365. 00
38. 10	*Tang.* 78598. 08
38. 17	*Sin.* 61955. 07
39. 27	*Tom.* 1011228. 18
43. 26	*Sec.* 137707. 89

In dextris faciebus.

Gr. ′	Lege.
86. 31	*Sec.* 1645868. 61
86. 18	*Mes.* 1118931. 66
86. 7	*Tom.* 1116925. 05
84. 27	*Sin.* 995[illegible]. 22
84. 13	*Mes.* 1099446. 60
84. 12	*Mes.* 1099320. 76
84. 11	*Tom.* 1099419. 47
84. 10	*Tom.* 1096[illegible].64 295
83. 26	*Mes.* 1093[illegible]. 03
80. 46	*Tom.* 1079464. 55
80. 14	*Tom.* 1077048. 15
76. 52	*Tang.* 428594. 72
75. 40	*Log.* 998626. 63
74. 4	*Log.* 998298. 62
73. 37	*Tang.* 340136. 12
73. 26	*Mes.* 1052654. 28
72. 39	*Tom.* 1052548. 08
71. 22	*Sec.* 312978. 62
71. 48	*Sin.* 94997. 21
71. 57	*Sin.* 95078. 65
68. 14	*Sec.* 260667. 09
67. 30	*Tang.* 241421. 36
58. 22	*Tom.* 1028027. 00
55. 38	*Mes.* 1016503. 27
53. 3	*Tang.* 132945. 71
53. 56	*Sec.* 169858. 25
52. 23	*Sec.* 163833. 55
50. 52	*Tang.* 122903. 81
47. 15	*Tom.* 1016825. 77

In Chiliade.

Nu. 317 | *Lege*, 250105. 93

TRIGONOMETRIÆ

Linearis, ac Logarithmicæ

PARS PRIOR

De communibus eiusdem fundamentis: specialiter autem de Plana.

Definitiones, ac Principia vniuersæ Trigonometriæ communia.

Triangulum.

I. TRIANGVLVM est figura ex tribus lateribus, ac tribus angulis constans. *Vt in prima, secunda, tertia, & quarta figura sunt triangula, A B C, D F E, G I H, K L M: in quibus quoduis latus, vt, A B, dicitur subtendere angulum sibi oppositum, vt, A C B, & sic in reliquis, &c.*

Quid sit latera triangulorũ angulos subtendere.

Trigonometria.

II. TRIGONOMETRIA est doctrina de dimensione triãgulorum, qua ex angulis cognitis ignota latera, vel ex lateribus cognitis ignoti anguli, & mixtim artificiosè arguuntur, seu dignoscuntur.

Triangulum planum, & sphæricum.

III. TRIANGVLVM duplex est, aliud planum, & aliud sphæricum. Triangulum planum est, quod ex tribus constat rectis lineis, quæ eius latera dicuntur. Triangulum sphęricum definitur in huius Tractatus posteriori Parte. *Vt in prima, & secunda figura sunt plana triangula, A B C, D F E, & in tertia, & quarta sunt sphærica, G I H, K L M.*

Trigonometria plana, & sphærica.

IV. HINC Trigonometria quoq; duplex est, nempè plana, quæ circa triangula plana; & sphærica, quę circa triangula sphęrica versatur. *De plana autem in huius Tractatus hac priore Parte, de sphærica verò in posteriori agẽdum erit.*

Triangulum planũ rectangulũ, & obliquangulum.

V. TRIANGVLVM planum aliud est rectangulum, & aliud obliquangulum. Rectangulum est, quod habet vnum angulum rectum. Obliquangulum, quod nullum habet angulum rectum. *Vt in prima figura rectangulum est, A C B, & in secunda obliquangulum, D E F.*

Triangulum planum æquilaterũ, æquicrure, aut Isosceles, & Scalenum.

VI. SIMILITER triangulum planũ vel est æquilaterum, quod nempè habet tria latera æqualia: vel æquicrure, aut Isosceles, quod duo tantum: aut Scalenum, quod habet omnia latera inæqualia.

In Triangulis rectãgulis hypotenusa, crura.

VII. IN triangulis planis rectangulis latus subtendens angulum rectum speciatim dicitur, Hypotenusa: includentia vero rectum, crura vocantur. *Vt in prima figura erunt, A B, hypotenusa, &, A C, C B, crura.*

In obliquangulis crura, basis, & angulus verticalis.

VIII. AT in obliquangulis duo quæuis latera possunt accipi tanquam crura, & tunc latus tertium est basis, cui angulus oppositus dicitur verticalis. *Vt in triangulo, D F E, secundæ figuræ, si supponantur, F D, D E, vt crura, erit, F E, basis, & D, angulus verticalis: at si pro cruribus accipiantur, D F, F E, erit, D E, basis, &, F, angulus verticalis.*

Gradus, minuta, secunda, &c.

IX. OMNIS circulus diuiditur in gradus 360, singuli gradus in 60 minuta, vnum minutum in totidem secunda, &c. quæ sic notari solent. Vt gr. 25. 12′. 17″. &c. significant gradus 25, minuta 12, secunda 17, &c.

Anguli rectilinei quantitas.

X. ANGVLI cuiusuis plani rectilinei mensura, seu quantitas est arcus circuli ex angulari pũcto, ad quoduis interuallum descripti, inter anguli crura comprehensus. *Vt in quinta figura anguli, L O M, quantitas est arcus, N I, vel, A D, qui spectant ad circulos, E C F D, B G H I, centro, O, vtcunq; descriptos: in quibus diametri, C D, E F, B H, G I, se secent ad angulos rectos.* Ex quibus innotescit, quod si arcus, N I, vel, A D, fuerit gradus 20, etiam subtensus ab eisdem angulus, L O M, erit gradus 20: si illi gr. 30, & iste gr. 30, &c. Vnde cum arcus, E D, sit gr. 90, etiam, E O D, angulus rectus erit gr. 90, & duo recti, C O E, E O D, gr. 180, & quatuor recti gr. 360. Quæ ergo de arcubus dicentur, eadem & de subtensis vt sic ab eisdem angulis, & è contra subintelligenda erunt, cum eodem numero graduũ, & minutorum, &c. numerentur.

Elicitur ex vltima sexti Elem.

Arcus, vel anguli cõplementũ, est mi-

noris quidem ipso quadrante, defectus ab eodē, maioris autem, excessus supra eundem quadrantem, hoc est supra gr.90.

EA, est complemētum tam, AD, arcus, quam, AEC; ipsius quidem, AD, est defectus ab, ED, qui est gr. 90; at pro, AEC, est excessus supra, EC, pariter gr.90. Sic angulus, EOA, est complementum nedum ipsius, AOD, acuti, sed etiam obtusi, AOC. Vnde si arcus, AD, vel angulus, AOD, sit gr.20, eius complementum erit, AE, vel, AOE, gr.70: si ille sit gr. 35.14', AE, vel, AOE, erit gr.54.46'. Et si, AEC, vel, AOC, fuerint gr.120; complementum, EA, vel, EOA, erit gr. 30: vt & graduum 132.45' complementum erunt gr.42.45', &c.

Supplementū est residuum arcus, vel anguli ad semicirculum, hoc est ad gr. 80.

XII. SVPPLEMENTVM arcus minoris, quam gr.180, vel anguli est residuum eiusdem ad gr.180. Vt in quinta figura ipsius arcus, AD, vt gr.20, supplementum est arcus, AEC, grad.160, & è contra: veluti acuti, DOA, supplementum est obtusus, AOC, & è contra. Hinc complementum alicuius anguli, vel arcus, vt, EA, ipsius, AD, est etiam complementum eius supplementi, AC.

Trigonometria linearis.

XIII. QVATVOR linearum generibus vtitur Trigonometria, nempe Sinibus, Tangentibus, Secātibus, ac Sinibus versis: quam idcirco Trigonometriam linearem appello, etsi ijsdem prout numeris exprimuntur vti soleat.

Sinus.

Chorda.

XIV. SINVS arcus, vel eidem subtensi anguli (qui etiam sinus rectus dici solet) est dimidium subtensæ, hoc est chordæ dupli arcus. Vel est perpendicularis cadens ab vno extremo arcus in diametrum circuli ab altero extremo eiusdem arcus protensam. Vt in sexta figura centro, O, sit descriptus circulus, ABCD, per diametros, AC, BD, sectus in quatuor quadrantes, in quorum cuiusq; arcu, vt, AD, sit assumptum quodcunq; punctum, M, à quo ducatur, MP, paralella, DB, secans, AC, in, H, & peripheriam in, P. Ergo subtensa, PM, dicitur chorda arcus, PAM, ac, PCM: & eius dimidium, HM, sinus arcus, AM, dimidij, PAM; & sinus arcus, MC, dimidij, MCP, vel sinus angulorum, AOM, MOC; qui ab, M, extremo arcus, AM, vel, MC, ducitur perpēdicularis super diametrum, AC, per alterum extremum, A, vel, C, protensam iuxta posteriorem definitionem. Sic, ducta, MI, perpendiculari ipsi, BD, est eadem, MI, sinus arcus, MD, &, MB, seu angulorum, MOD, MOB. Vides ergo eundem sinum conuenire duobus arcubus semicirculum implentibus, etenim vtrisq; definitio sinus adaptatur.

Chorda.

3. Tertij Element.

Idē Sinus est dati arcus, vel anguli, & eius supplementi; vt gr. 30, & gr. 150.

Tangens.

XV. TANGENS arcus, vel eidem subtensi anguli, est recta circulum tangens in vno extremo ipsius arcus, inter punctum contactus, & productam à centro per aliud extremum intercepta. Vt, stante eodem puncto, M, si per ipsum ab, O, indefinitè extendatur, OQ; tangant verò circulum, ABCD, in punctis, A, D, rectæ, AF, DR, indefinitæ, quæ ipsi, OQ, incidant in, E, G: erit, AE, Tangens arcus, AM, seu anguli, AOM; &, DG, Tangens ipsius, MD, vel, MOD.

Secans.

XVI. SECANS arcus, &c. est intercepta inter centrum circuli, & Tangentem, transiens per extremum arcus, in quo non fit contactus. Vt ipsius arcus, AM, vel anguli, AOM, Secans est, OE. Similiter ipsius, MD, vel, MOD, Secans est, OG. Non sunt autem Tangentes, & Secantes arcuum, vel angulorum quadrante maiorum: quia ex gr.punctum, G, non potest tantum eleuari, vt, OG, perueniat ad, OA; vel, E, tantum deprimi, vt, OE, perueniat ad, OD.

Tangētes, & Secantes non sunt arcuum, vel angulorū supra gr.90.

Sinus versus, qui est arcuū, vel angulorū tam infra, quam supra gr.90, vsq; ad gr.180.

XVII. SINVS versus, Antiquis sagitta, arcus, &c. est portio diametri inter eiusdem, Sinum, & peripheriani contenta, qui ideò est tam arcus, &c. quadrante minoris, quam maioris vsque ad gr. 180. Vt, AH, est sinus versus arcus, AM, vel anguli, AOM: HC, est sinus versus ipsius, MDC, vel, MOC: vt &, DI, ipsius, MD, vel, MOD: &, IB, ipsius, MAB, vel, MOB.

Sinus secund. Tangens sec. &c.

XVIII. SINVS, Tangens, Secans, & Sinus versus secundus, seu complementi propositi arcus, vel anguli, est, qui spectat ad eiusdem arcus, vel anguli complementum. Vt pro arcu, AM, Sinus est, MH, sed sinus secundus, seu complementi est, MI; Tangens secunda, DG, Secans secunda, OG, & Sinus versus secundus, ID: quia hi spectant ad arcum, MD, seu angulum, MOD, complementa prædictorum. Ita vicissim ipsius, MD, vel, MOD, Sinus secundus est, HM, Tangens secunda, AE, Secans secunda, OE, & Sinus versus sec. AH. Recordare autem Sinum sec. arcus, vel anguli supra gr.90, vt ipsius, MAB, vel, MOB, esse sinum excessus supra quadrantem, nempè esse, MH, Tangentem sec. AE, Secantem sec. OE, & Sinum versum sec. AH. Vt grad.112.25' Sinus sec. Tangens sec. &c. erit Sinus, Tangens, &c. graduum 22.25' excessus supra quadrantem.

Nota pro Sinu secun. &c. arcuum, vel angulorum supra 90.

Radius, Sinus integer, Sinus totus, qui est Sinus graduum 90, seu anguli recti.

XIX. RADIVS est cuiuscunq; circuli semidiameter, qui est omnium Sinuum maximus, nempè Sinus graduum 90, & propterea ab aliquibus dicitur etiam, Sinus integer, vel Sinus totus. Vt, OD, Sinus arcus, AD, vel anguli recti, AOD, grad.90. seu illi æqualis, OM, vel, OA, est Radius circuli, ABCD, qui in sequenti Tabula intelligitur sectus in particulas æquales 10000000.

Canon triangulorum, seu trigonometricus.

XX. CANON triangulorum, seu trigonometricus, est Tabula, in qua statuto cuiusuis circuli Radio, vt, OD, exempli gratia particularum 10000000, vel 100000 (quo in sequentibus vt plurimum facilitatis gratia vtemur) seu plurium, aut pauciorum pro libito ciphrarum, exhibentur omnes Sinus, Tangentes, & Secantes (exclusis Sinibus versis, cum hi ex Sinibus, vt patebit, facilè deduci possint) communiter ad singulos gradus, & minuta quadrantis, relatiuè ad suppositum Radium: & hoc in gratiam dimensionis triangulorum, quorum latera, seu anguli ope dictarum linearum artificiosè mensurantur, vt manifestum erit. Sic ergò in sequenti Tabula, seu Canone assumpto Radio, OD, particularum 100000 (relictis duabus ciphris) si proponatur ex gr.arcus, AM, vel angulus, AOM, graduum 20.15', in eadem inuenietur, HM, Sinum ipsius, AM, vel anguli, AOM, esse earundem particularum 34612

Notæ cum ex Tabulis extrahẽtur numeri mutilati.

Cur Canon triãgulorum non extendatur vltra gr. 90.

Data, vel nota quantitas.

Latera triãgulorum quomodo dicantur nota.

Arcus, vel angulus notus quis.

(& nota hic pro duabus relictis notis 71 *dimidium vnitatis superantibus, superaddi ipsi sinui* 34611 *vnitatem, vnde est* 34612; *vt semper facere opus erit cum, quod relinquitur superat dimidium vnitatis*) *Tangentem*, AE, 36892, *Secantem*, OE, 106588, & *Sinum versum*, AH, 6181, *per inferius tradenda præcepta. Non extenditur verò Tabula vltra gr.* 90, *quia eiusdem Sinus seruiunt quoq; pro arcubus supra gr.* 90 *vsq; ad gr.* 180: *arcuum verò supra gr.* 90 *nullæ sunt Tangentes, vel Secantes, vt patuit Numero* 14, & 16.

XXI. DATA, vel nota dicitur quantitas, quam mensura famosa, seu pro libito assumpta, secundum numerum metitur notum. Sic ergo dantur latera planorum triangulorum, cum scimus quot sint pedes, vlnæ, passus, aut decempedæ, &c. Eadem verò dantur tanquam Sinus, Tangentes, vel Secantes, &c. cum in partibus suppositi Radij, vt 100000, innotescunt. Similiter datur propositus arcus, vel angulus, cum eorundem numerus graduum, & minutorum, &c. cognitus extat.

Considerationes, & operationes quædam præcipuè circa Regulam Trium, tam per lineas, quam per logarithmos exercendam, summè adnotandæ.

Regula Triũ.

XXII. REGVLA Trium, seu Aurea, est, per quam, datis tribus quibuscunq; numeris, quæritur quartus proportionalis ignotus; ita vt sit primus ad secundum, vt tertius ad quartum. Hic autem inuenitur ducendo secundum in tertium, ac productum per primum diuidendo, quotiens enim est quartus proportionalis quæsitus. *Quoniam verò in sequenti Tabula sunt omnium triangulorum latera relatiuè ad Radium, nempè tanquam Sinus, vel Tangentes, aut Secantes, &c. sicuti patebit, ideò vt eadem latera in alia quacunq; assumpta mensura noti ficentur, necesse est ipsam Regulam Trium iugiter adhibere, iuxta tradenda præcepta accommodatam.*

Iuxta p. 19, & 20. Septimi Elementorum.

Necessitas hic Regulæ Trium.

XXIII. QVONIAM verò in eadẽ exercenda cogimur, vt plurimum in fractiones incidere, quæ molestiam pariunt; calculi expediet facilitati fractionibus decimis sẽper vti. Voco autem fractiones decimas, quæ habent pro denominatore vnitatem cum ciphris, vt 10, vel 100, vel 1000, &c. & per punctum interpositum ab integro numero sic versus dextram separari solent. Vt patet ex gr. in hoc num. 235. 7 idem significante, ac $235\frac{7}{10}$: sicuti 25. 48 idem est ac $25\frac{48}{100}$, vel 318. 529 idem ac $318\frac{529}{1000}$, &c. Quæ cum integris adduntur, subtrahuntur, multiplicantur, & diuiduntur non secus, ac si essent puri integri, si modo integra sub integris more solito, & deinceps fractiones in additione præsertim, & subtractione collocentur: vt patet in his exemplis.

Fractiones decimæ. Operationes in eisdem cũ integris, sunt velut in puris integris. Vnde fac perinde, ac si deberes addere 23510 *cum* 10748 : & 28708 *cum* 5370 (*ponẽdo ciphras pro notis vacantibus*) *vel subtrahere* 509 *ex* 2034 & 8481 *ex* 57800; *multiplic* 8325 *per* 72, *et* 273 *per* 582 *; a diuid.* 24853 *per* 56, & 384760 *per* 224.

Additio.

23. 51	287. 08
10. 748	53. 7
34. 258	340. 78

Subtractio.

20. 34	57. 8
5. 09	8. 481
15. 25	49. 319

Multiplicatio.

83. 25	27. 3
7. 2	5. 82
16650	546
58275	2184
	1365
599. 400	158. 886

Diuisio.

5. 6	248. 53	2. 24	3847. 60
	44. 3		1717
	245		1607
	213 / 45		396
			1720 / 152

Regulæ interpunctionis in multiplicationibus, & diuisionibus.

Nota autem in multiplicationibus, quot sunt notæ puncto ad dexteram separatæ in ambobus numeris sese multiplicantibus, tot in producto esse puncto separandas. Vnde in harum multiplicationum productis tres notæ separatæ fuerunt, quia tres erant in numeris multiplicatis. In diuisionibus verò è contra quot sunt notæ separatæ in diuidendo tot debent esse notæ separatæ in diuisore, ac quotiente simul sumptæ: & si diuidendus tot habeat notas, vel pauciores, quam diuisor, eidem diuiso addendæ sunt ciphræ, & continuanda est diuisio, quousq; libuerit, sed ita vt possint haberi notæ separandæ in quotiente, vel saltem ipse quotiens completus. *Sic ergo in primo exemplo diuisionis cum diuidendus* 248.53 *habeat duas notas separatas, nempè* 53, & *diuisor* 5.6 *habeat vnam, quæ est* 6, *debuit in quotiente* 44. 3 *vna nota separari, nempè* 3, *vt notæ separatæ in diuisore, & quotiente essent duæ, veluti sunt duæ in diuidendo. In posteriori verò exemplo diuidendus erat* 3847.6, *diuisor* 2.24, *vnde cum notæ separatæ in diuisore superent eas, quæ sunt in diuidendo, eidem addita est ciphra, & continuata est diuisio, vt haberetur quotiens completus* 1717, *à quo non sunt notæ separandæ, nam duas habet diuisor, & duas quoq; diuisum, vnde adæquantur notæ separatæ in diuisore, & quotiente, notis separatis in diuiso, & ideò, &c.*

XXIV. QVÆLIBET fractio in fractio-

Regulæ commutandi fractiones decimas in alias, & é contra.

nes decimas commutabitur, si fiat vt denominator datæ fractionis ad suum numeratorem, ita denominator 10, vel 100, vel 1000, &c. ad alium, qui erit numerator fractionis decimæ quæsitæ. E' contra fractio decima quæcunq; in aliam quamcunque commutabitur, si fiat vt denominator fractionis decimæ ad numeratorem, ita denominator propositæ fractionis ad alium, qui erit denominator quæsitæ fractionis. *Per has ergo Regulas inueniemus* $\frac{3}{4}$ *esse* $\frac{75}{100}$, *similiter* $\frac{5}{7}$ *esse proximè* $\frac{714}{1000}$. *Et é contra* $\frac{583}{1000}$, *si in fractionem duodecimam, seu habentem* 12. *pro denominatore sit commutanda esse ferè* $\frac{7}{12}$. *Et nota cum fiet diuisio alicuius numeri per vnitatem cum ciphris, vt per* 10, *vel* 100, *vel* 1000, *&c. seu per Radium, quod semper ex tali diuisione, si quid supersit, fractiones decimæ orientur.*

Licet cõmutatæ, vt sic fractiones quandoq; inuicem ad amussim non æquiualeãt; sufficit tamẽ proximè æquiualere, ita vt nihil sensibile intersit.

Nota quando veniant fractiones decimæ.

XXV. CVM, vt dictum est Num. 22, in dimensione triangulorum continuò Regula Trium sit nobis adhibenda, qua cogimur in magnorum numerorum multiplicationem, & diuisionem plerumque incidere, quæ & tædiosæ, & errori sunt obnoxiæ: propterea quidam numeri artificiales à recentioribus adinuenti sunt, & in Tabulis ascripti nedum numeris absolutis, sed etiam relatiuis ad circuli arcus, hoc est Sinibus, Tangentibus, & Secantibus: quorum hæc est proprietas, vt conuertant multiplicationem in additionem, & diuisionem in subtractionem, vocanturq; generali nomine Logarithmi.

Io. Neperus Scotus primus extitit logarithmorũ Inuẽtor, quos Anno 1620. *promulgauit.*

Origo Logarithmorum.

Numeros istos ex integris, & fractionibus vnitatis, vt plurimum constare animaduertas; in hoc differenter à serie, A.

	A	B	L
	1	0	
	2	1	
C	4	2 G	1
	8	3	
D	16	4 H	2
	32	5	
	64	6	3
	128	7	
E	256	8 I	4
	512	9	
F	1024	10 K	5

Ad horum verò aliqualem intelligentiam cogita quãdam seriem numerorum ab vnitate continuò geometricè proportionalium, vt in serie, A, *sed differenter ab,* A, *quia illi per adeò paruas proportiones, oẽs tamen æquales, incedant (quas idcirco minimas vocare possumus) vt ab eadem vnitate vsq; ad* 10 *earundem minimarũ proportionũ interijciantur* 10000000 *(sic enim inter* 1, *&* 10 *concipientur interponi* 9999999 *termini earundem proportionum minimarum) & continuatis ijsdem minimis proportionibus à* 10 *vsq; ad* 100, *habebuntur aliæ* 10000000 *proportiones minimæ, ita vt ab* 1 *vsq; ad* 100 *sint* 20000000 *ex ijsdem, vnde ab* 1 *vsque ad* 1000 *erunt* 30000000 *proportiunculæ, ab* 1 *vsq; ad* 10000 *erunt* 40000000 *ex ijsdem, & sic deinceps in infinitum. Hinc fit vt propter tam minutam proportionis diuisionem, numeri absoluti ab* 1 *vsq; ad* 10000, *& deinceps coincidant ferè cum articulis, seu terminis dictarum proportiunctularum; vt & numeri Sinuum, Tangentium, & Secantium.*

Quia proportio 1 *ad* 10 *est æqualis proportioni* 10 *ad* 100, *necnon* 100 *ad* 1000, *vt &* 1000 *ad* 10000, *&c.*

Si ergo, concepta hac quodamodo infinita serie geometricè proportionalium, quæ similis est seriei, A, *eiusdem numeris intelligantur apponi in alia serie indices dictarum proportiõcularum nempè Vnitati ciphra, numero primæ proportiunculæ,* 1, *secundæ* 2, *tertiæ* 3, *quartæ* 4, *&c. vt patet in serie,* B, *dictæ aliæ seriei simili: intelligemus hos esse Logarithmos numerorum illius infinitæ seriei (cui similis est series,* A) *indicantes per suas vnitates quota sit quælibet proportio ab vnitate: & eos arithmeticè proportionales, cum per incrementum vnitatis continuò procedant. Sic ergo cum Logarithmus ex gr. numeri* 7, *qui cadit & ipse propinquissimè in dictam seriem infinitam simili ipsi,* A, *inuentus sit* 8450980, *ille indicabit inter vnitatem, & numerum* 7 *in dicta infinita serie simili ipsi,* A, *interijci* 8450980 *proportiunculas. Similiter cum Logarithmus numeri* 128 *sit* 21072100, *ostẽdit in eadem inter* 1, *&* 128 *interponi* 21072100 *ex dictis proportiunculis, & sic res se habet in quibuslibet numeris Sinuum, Tangentium, & Secantium, qui omnes in dicta serie geometrica simili ipsi,* A, *concipiendi sunt, veluti omnes eorum Logarithmi in serie simili ipsi,* B, *pariter sunt intelligendi. Cum verò accipiuntur Logarithmi mutilati, vt cum pro* 8450980 *sumitur* 8451O, *vel pro* 21072100 *ipse* 210721, *tunc intelligitur institui alia series Logarithmorum, vt,* L, *in qua concipitur Logarithmus* 1, *ascribi non numero primæ proportiunculæ, sed centesimæ ab Vnitate, sicuti* 2 *ducentesimæ,* 3 *trecentesimæ, &c. & sic fiunt Logarithmi, qui sunt prædictorum subcentupli, quia in hac noua serie vnaquæq; proportio valet* 100 *proportiunculas ex prædictis, & est tanquam minima proportio. Nihil obest ergo si Logarithmi sic mutilati ex Tabulis desumantur: vt patet in numeris seriei,* L, *simile quoddam exhibentibus, qui pariter pro Logarithmis seriei,* A, *assumi possunt. Vbi enim minima proportio erat, quam habet* 1 *ad* 2, *substituitur pro minima ea, quam habet* 1 *ad* 4.

Seriei infinitæ, &c. Logarithmi sunt arithmeticè proportionales.

Vt in posteriori Tabula.

Omnes num. absoluti sunt concipiẽdi in quadam infinita serie geometricè proportionali, simili seriei, A, *& in eadem quoq; omnes Sinus, Tangẽtes, & Secantes. Eorum autem Logarith. in alia serie arithmeticè proportionali seriei,* B, *aut,* L, *simili.*

Si quis verò scire cupiat quænam sit minima proportio, quæ assumitur pro reliquarum proportionum cõmuni mensura posito Logarithmo vnitatis Ciphra, & Logarith. Denarij 10000000, *notet eam proximè esse, quæ est inter* 1, *qui dicatur,* A, *&* $1 - \frac{23025853}{10000000000000}$, *qui dicatur,* B. *At si Denarij Logarith. ponatur* 100000, *illa proximè est inter,* A, 1, *&,* B, $1 - \frac{2302585}{10000000000000}$, *horum enim Logarithmus est* 1 *indicans vnam proportionem. Si ergo,* B, *ducatur in se ipsum fiatque,* C, *deinde idem,* B, *ducatur in factum,* C, *& successiuè in factos subsequentes, qui sint,* D, E, F, G, H, I, K, *&c. hi erunt numeri dictæ infinitæ seriei, geometricè proportionales ab Vnitate; & eorum Logarithmi* 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, *&c. Quod si continuari intelligantur multiplicationes ipsius,* B, *in factos successiuè, & eorum Logarithmi donec perueniatur ad factum* 2 *numerũ absolutum, vel ad* 3, 4, 5, 6, 7, 8, 9, 10, *&c. aut saltem ad factos, qui sint eisdem propin-*

Aliã Logarithmorum speciẽ prius euulgauit Neperus, in quibus pro Logarithmo Radij posuit ciphrã, de quibus vide meum Direct. p. p. cap. 4. *At hos præsentiores, & ipse tandem dijudicauit, in quibus vnitatis Log. est ciphra, & denarij Log. vnitas cum ciphris, vt* 10000000.

quissimi, etiam eorum Logarithmi exhibebunt propinquiss. Logarith. numerorum absolutorum 2,3,4,5, &c. Intellige ergo in serie, A, supraposita, Vnitati succedere immediatè pro ipso 2 numerum $1\frac{23025853}{10000000000000}$, *vel* $1\frac{23025853}{1000000000000}$, *& capies, quod sit initium dictæ infinitæ seriei.*

Trium, vel quatuor proportionalium numerorum Logarithmi sunt æquidifferentes.

Hinc sequitur in eadem infinita serie, & subinde in numeris absolutis quousque extenduntur Logarithmi, seu in Sinibus, Tangentibus, & Secantibus, &c. qui omnes cadunt propinquissimè in dicta serie infinita si quatuor quilibet numeri, vt, C, D, E, F, sint proportionales, eorum Logarithmos esse æquidifferentes. Cum enim proportio, C, ad, D, ponatur æqualis proportioni, E, ad, F, ex tot proportionculis componetur proportio, C, ad, D, ex quot componetur proportio, E, ad, F: dictæ verò proportionculæ indicantur, seu numerantur per vnitates, quę sunt in eorum Logarithmis (etenim eorum quælibet vnitas indicat vnam proportionculam) ergo tot vnitatibus Logarithmus ipsius, C, differet à Logarithmo, D, quot vnitatibus Logarithmus ipsius, E, differet à Logarithmo, F, hoc est erunt eorum Logarithmi æquidifferentes.

Trium, vel quatuor proportionalium numerorum Logarithmi extremorum æquātur duplo Log. med. seu aggregato Logarithmorum mediorum.

Ex quo tandem deducitur, quod summa Logarithmorum extremorum, C, F, erit æqualis sūmæ Logarithmorum mediorum, D, E, hoc enim conuenit æquidifferentibus numeris: vt si ex gr. 7 excedit 4, quantum 12 excedit 9, nempè 3: summa extremorum 7, & 9, æquatur summæ mediorum 4, & 12, quæ est 16. Et hoc idē patet in Logarithmis seriei, B, nempè in ipsis, G, H, I, K, proportionalibus seriei, A, nempè, C, D, E, F, ascriptis; summa enim, G, K, æquatur summæ, H, I, quæ est 12. Si ergo in numeris harum Tabularum, quibus ascripti sūt Logarithmi, quatuor fuerint proportionales, summa Logarithmorum extremorum erit ęqualis summæ Logarithmorum mediorum: sicuti & trium proportionalium sūma Logarithmorum extremorum erit quoq; æqualis duplo Logarithmi medij: & è contra.

Vide Rheticum, Lāsbergium, Pitiscium, Finkium, Clauium, Maginum, Neperum, Briggium, Vrsinum, Kepl ē, vel alios, &c.

Modus autem, & compendia inueniendi nedum Sinus, Tangentes, Secantes, & Sinus versos, ad datum Radium: sed etiam Logarithmos numerorum absolutorum, necnon dictorum Sinuum, Tangentium, &c. non descripta integra iam dicta infinita serie (hoc enim neq; est necessarium, nec possibile) sed tantum aliquibus eiusdem inuentis numeris, eorumque Logarithmis, tanquam reliquorum radicibus, seu certis limitibus, intra quos cadentium numerorum Logarithmi facile postea per partis proportionalis inuentionem habeantur apud alios Authores, ac præsertim Briggium, & Vlacq in eiusdem Briggij Arithmetica Logarithmica videri possunt. Hæc enim cum non paucis forent explicanda, nec sequentium calculorum praxi sint necessaria, propterea breuitatis causa hic prætermittuntur.

Logarithmi, Mesologarithmi, Tomologarithmi, et Versilogarithmi: Sinibus, Tāg. Secant. ac Sinibus versis sūt substituti.

XXVI. ETSI verò Logarithmi, qui non tam numeris absolutis, quam Sinibus, Tangentibus, & Secantibus in Tabulis hic adiectis ascribuntur, sint eiusdem rationis, cum habeant omnes dictam proprietatem: attamen distinctionis gratia pro his specialia nomina formata sunt. Vbi ergo dici poterat Logarithmus Sinus, Tangentis, Secantis, &c. pro Sinibus nomen genericum Logarithmi (quod vt sic conuenit numeris absolutis) tanquam speciale retentum est. Logarithmi verò Tangentium dicti sunt, Mesologarithmi: & Logarithmi Secantium, Tomologarithmi: ac Sinuum versorum Versilogarithmi, quibus in meo Directorio vsus sum, licet hic parum in vsum venient.

Nota autem quod dicere Logarithmum, vel Mesolog. &c. dati arcus, vel anguli, vt graduum 20, erit dicere Logarithmum Sinus, vel Tangentis, &c. graduum 20. At Logarithmus ex gr. numeri 318, eiusdem tanquam numeri absoluti subintelligendus erit. Hinc Log. secundus, Mesolog. secundus, Tomolog. secundus, seu complementis arcus, vel anguli, sicut & de Sinibus, Tangentibus, ac Secantibus secundis Num. 18 præludiali dictum est, accipiendus erit. Et tandem non ignorandum me Trigonometriam Logarithmicam appellare, quatenus procedit per hos Logarithmos.

Trigonometria logarithmica. Canonis duplicis trigonometrici dispositio.

XXVII. VT ergo calculator vtraq; Trigonometria, hoc est vel lineari, vel logarithmica pro libito vti possit, Canon duplex trigonometricus, scilicet Sinus, Tangentes, &c. & Logarithmos, ac Mesolog. &c. in simul comprehendens hic additus est, cuius dispositio sic se habet. In vnaquaq; pagina sunt 7 ordines numerorum: primus ordo continet gradus, & minuta quadrantis circuli, gradus quidem in capite paginæ sinistræ, & in prima columna vsq; ad 45, & in calce paginæ dextræ vsq; ad 90 procedentes, charactere crassiusculo prænotatos: minuta vero 60 descendentia in pagina sinistra, & ascendentia in dextra. Excipe tamen primum, & vltimum quadrantis gradum, prior enim primi gradus, & vltimi posterior medietas procedit per singula 10″, & reliquæ duæ eorundem medietates per singula 30″, vt ibi non nihil exactior calculus, quam per sola minuta, haberi possit. Sic verò tota Tabula iuxta consuetum disposita est, vt pagina altera semper alterius complementum è regione visendum præbeat. Sequuntur deinde tres priores numerorum ordines, nempè Sinuum, Tangentium, & Secantium: ac tres posteriores, scilicet Logarithmorum pro Sinibus, Mesologarithmorum pro Tangentibus, ac Tomologarithmorum pro Secantibus eiusdem paginæ, vt & tituli indicant, existente Logarithmo Radij 10,000000,0, ad similitudinem minutorum in sinistra pagina deorsum, & in dextra sursum crescentium. *Hi verò Logarithmi respiciunt Radium particularum* 100000, 00000, *vnde & Sinus, Tangentes, ac Secantes tribus notis longiores esse debuissent:*

Numeri Sinuum, Tang. &c. deberent

esse in adiuncto Canone tribus notis longiores relatiué ad eius Logarithmos. Chilias numerorum absolutorum ab 1 vsq; ad 1000, cũ eorum Logar. ac differentijs,

verum quia hoc nihil præiudicij calculis afferre potest, cum illi vel per solas lineas, vel per solos Logarithmos sine respectu ad lineas, sed tantum relatiué ad arcus fieri soleant, propterea cum ad Radium 10000000 sufficere possent, sic eosdem retinendos esse duxi. Tandem Canoni adiuncta est Chilias numerorum absolutorum ab 1 vsq; ad 1000, cum eorum Logarithmis, ac differẽtijs ijsdem interpositis, in gratiam præcipuè Trigonometriæ planæ logarithmicæ. Ab ipsis verò Tabularum numeris duæ ad dexteram notæ puncto separatæ sunt, non quidem vt fractiones decimæ, sed vt modo longioribus, modo breuioribus numeris pro libito calculator vti possit; qui Tabularum numeri cum accipientur completi, expediet eosdem describere sine puncto, ne illud faciat confusionem, dum in calculis occurrent fractiones decimæ adhibendæ, cum & ipsæ punctis separari soleant. *Canoni adiecta.*

XXVIII. DENIQ; congruum erit has Notas præintelligere, eisdemq; breuitatis gratia in sequentibus vti. Semper enim significabitur per *Notæ in sequentibus vsurpandæ.*

Comp. Complementum.
Suppl. Supplementum.
Gr.25.17'.48'', &c. Gradus 25, minuta 17, secunda 48, &c. & sic in cæteris.
Si. Sinus.
Si.2. Sinus secundus, seu complementi.
Ta. Tangens.
Ta.2. Tangens secunda.
Se. Secans.
Se.2. Secans secunda.
Si.ver. Sinus versus.
Si.ver.2. Sinus versus secundus.
Log. vel l. Logarithmus.
Log.2, vel l 2. Logarithmus secundus.
Res. log. aut R l. Residuum logarithmi ad duplum log. Radij, nẽpè ad 200000000.
Mes. vel M. Mesologarithmus.
Mes.2, vel M. 2. Mesologarithmus secundus.
Tom. vel T. Tomologarithmus.
Tom.2, vel T. 2. Tomologarithmus secundus.
Vers. Versilogarithmus.
Vers.2 Versilogarithmus secundus.
Carac. Caracteristica logarithmi.
Canonem. Canon duplex trigonometricus
Chiliadem. Chilias numerorum absolutorum ab 1 vsq; ad 1000, &c.

TRIGONOMETRIÆ PLANÆ Linearis, & Logarithmicæ

PROBLEMA PRIMVM.

Dati Arcus, vel anguli, Sinum, Ta. Se. &c. vel Log. Mes. &c. è Canone extrahere.

Extractio linearum, vel Logar. è Can. Pro gradibus infra 45 quomodo sit facienda.

SI datus arcus, vel angulus nõ excedat gr. 45, vt si sit ex gr. gradus 37. 43', quærendi erũt in sinistris Canonis faciebus, & in fronte primæ columnę ipsi gr. 37, ac in eadẽ descendendo 43', quibus in directum aderũt in suis columnis Si. 61176 (si velimus relinquere notas post punctum) Ta. 77335, Se. 126415, Log. 978658, Mes. 988838, & Tom. 1010180. *In dimidio primo autem quadrãtis gradu eosdẽ quoq; habes tabulatos ad singula* 10'', *& in reliqua medietate ad* 30''. Quod si sit supra gr. 45, & non vltra gr. 90, vt gr. 58. 32', quærendi erunt in dextris faciebus, & in calce columnæ graduum ipsi gr. 58, & in eadem ascendendo 32', quibus erunt in directum in suis columnis Si. 85294, Ta. 163398, Se. 191570, Log. 993092, Mes. 1021325, Tom. 1028233. *Porrò in vltimi gradus posteriori medietate eosdem quoq; habebis ad singula* 10'', *& in priori ad singula* 30''. Verum si datus arcus, vel angulus excederet quidem gr. 90, sed non gr. 180 (vt semper erunt nobis tractandi, quia omnis angulus minor est quam gr. 180, seu omnis arcus, qui sit latus trianguli sphærici) vt si esset gr. 120. 40', quærendus esset Si. vel Ta. aut Log. &c. eorundem supplementi, hoc est graduum 59. 20', vel Si. 2, Ta. 2, aut Log. 2 excessus supra quadrantem, hoc est graduum 30. 40'.

Pro gradibus supra 45, sed non supra 90.

Pro gradibus supra 90, & infra 180.

Pro habendo vero Si. ver. graduum infra 90, vt gr. 37. 43', nota comp. gr. 52. 17', eiusque cape Sinum 79105, quem deme ex Radio 100000, & restabit 20895 Si. ver. graduum 37. 43'. At pro gradibus supra 90, vt pro gr. 120. 40' nota comp. gr. 30. 40', nempè excessum supra gr. 90, & eius cape Sinum 51004, quem adde ipsi Radio 100000, & fiet 151004 Si. ver. graduum 120. 40'.

Pro Si. ver. graduum infra 90.

Pro Si ver. graduum supra 90 vsq; ad 180.

Si quis vellet dari arcus, vt gr. 20. 12' Versilog. illi capiendus esset Log. dimidij arcus, nempe Log. gr. 10. 6', qui est 924395, & eius duplo 1848790, addito semper Log. numeri 2, seu Binarij, qui est 030103, fieret summa 1878893, à qua subtracto Radij Log. 1000000 (seu vltimi ad sinistram loci deleta vnitate) remaneret 878893 Versilog. graduum 20. 12' quæsitus. Idem fiet pro gr. supra 90.

Pro Versilogarithmis.

Si quis verò cuperet vltra gr. & minuta eosdem extrahere etiam ad secunda (quæ non sint Tabulata) eidem pars proportionalis sic venanda esset. Vt si quæratur Sinus graduum 37. 14'. 20'', cum gr. 37. 14' capto Sinu 60506, eoque dempto ex Sinu proximè maiore tabulato 60529, vt restet differentia 23, hæc multiplicabitur per secunda 20, & productum 460 per 60 (seu compendiosius 46 per 6) diuisum dabit quotiẽtem 8, nempè partem proportionalem differentiæ 23 congruentem ipsis 20'', quæ addita inuento Sinui 60506 constituet Sinum 60514 dictorum graduum 37. 14'. 20''. *Eadem ratione Ta. Se. &c. Log. Mes. &c. etiam ad secunda haberi poterunt: aduertendo tamen quod ad initium, & finem quadrantis, vbi arcus procedunt per* 10'', *productio diuisio non per* 60, *sed per* 10, *& vbi per* 30'', *& per* 30 *fieri debet.*

Pro gr. minutis, & secundis eorundem extractio.

Fit nempè vt 60'' ad 23, ita 20'' ad 8.

Nota pro initio, & fine quadrantis in Canone.

Denique cum est extrahendus Si. Ta. &c. secundus graduum infra 90, cum minutis, vel etiam secundis scis extrahendum esse Si. Ta &c. comp. hoc est defectus à quadrãte; & pro gr. min. & sec. supra 90, scis comp. esse excessũ supra 90. Vnde expeditiuis erit, præsertim cũ ad sunt secunda, notare seorsim talem defectũ, vel excessum ad gr. 90, & deinde Si. Ta. &c. huius cõp. vt supra inuenire.

Pro extrahẽdis Si. 2, Ta. 2, &c. graduũ tam infra, quam supra gr. 90.

Si ergo postuletur Si. 2 graduum 25. 38'. 43'', notato comp. 64. 21'. 17'' huius quæram Sinum, qui erit Si. 2 graduum prædictorum. At si quæratur Si. 2 graduum 118. 4'. 3'', notato comp. hoc est excessu supra gr. 90, nempè gr. 28. 4'. 3'', horum Sinus erit Sinus graduum 118. 4'. 3''. Caue ergo ne confundaris in quærendo Sinu graduum supra 90, & eorundem Sinu 2, etenim ex gr. pro Sinu graduum 120 debes accipere Siuum suppl. hoc est gr. 60: at si vis Si. 2 graduum 120, debes capere Sinum excessus supra gr. 90, hoc est Si. graduum 30. Et eadem ratio currit pro cæteris lineis, ac Log. veruntamen non hallucinaberis, si nomina comp. & suppl. rectè apprehenderis. Nota tamen cum ex Tabulis extrahẽtur numeri longiores, quod semper exactiores ipsę operationes euadent.

Nota.

Nota.

PROBLEMA SECVNDVM.

Dati Sinus, vel Ta. &c. seu Log. Mes. &c. arcum, aut angulum in eodem Canone inuenire.

Extractio arcuum ex Canone cum datis lineis, vel Log. quomodo fit facienda.

DATVS Sinus quærendus est in columnis Sinuum, data Tangens inter Tãgentes, &c. datus Log. Mesolog. &c. inter Log. Mes. &c. tam in dextris, quam in siniſtris Canonis faciebus, & si reperiatur in Tabula, accipientur gradus, & minuta illi in directum in columella gr. & min. in eadem facie respondentia. At si cadat intermedius tabulatis, poterit (si exactiorem calculum non cures) accipi arcus propinquiori tabulato respondens. *Sic ergo dato Sinui* 45399 *inuenies respondere gr.* 27. 0′, *Tangenti* 120593 *gr.* 50. 20′, *&c. Log.* 960070 *gr.* 23. 30′, *& sic in reliquis. At pro Sinu* 53489, *quem non reperies in Tabula, capies propinquiorem Sinum tabulatum* 53484, *cui respondent gr.* 32. 20′, *&c.*

Exactior extractio, quæ per partem proportionalẽ habetur.

Verum cupiens exactiorem arcum (sumptis semper gradibus, & minutis, &c. proximè minori tabulato respondentibus) subtrahe eundem proximè minorem ex proximè maiori, & ex dato, vt restet differentia maior, & minor. Deinde per Regulam trium, vt illa ad hanc, ita fac 60″ ad secunda quæsiti arcus. *Vt cum proposito Sinu* 53489 *proximè minor sit in Tabula* 53484, *dans gr.* 32. 20′ *deme ipsũ ex proximè maiori* 53509, *& ex dato* 53489, *& proueniet differentia maior* 25, *& minor* 5. *Ducas ergo* 5 *per* 60, *& productum* 300 *diuide per* 25, *& fient pro quotiente* 12″; *vnde arcus quæsitus erit gr.* 32. 20′. 12″. *Ad initium autem, & finem quadrantis, vbi arcus per* 10″, *vel* 30″ *procedunt, minor differentia ducenda erit per* 10, *seu per* 30, *& productum per maiorem diuisum dabit secunda iungenda tabulatis, vt exactè quæsitus arcus colligatur.*

Vt 25 *ad* 5, *ita fit* 60 *ad* 12.

Nota pro initio, & fine quadrantis in Canone.

Pro Sinibus versis.

Sinus versus, si sit Radio minor, demitur ex Radio, vel si Radio maior, tollitur è contra Radius ex eo, & residui tanquam Sinus quæsitus arcus, demptus à quadrante in priori casu, & additus eidem in posteriori, relinquit, vel componit arcum dati Sinus versi. *Vt Si. ver.* 153, *Radio* 100000 *minor, ex eo demptus relinquit Sinum* 99847 *graduũ* 86. 50′, *qui demptus ex gr.* 90, *dat gr.* 3. 10′, *cuius* 153 *est Si. versus. At Si. verso existente* 199847 *Radio maiori, sublato* 100000, *restat Sinus* 99847 *graduum* 86. 50′, *addendo ũ gradibus* 90, *vt fiat arcus gr.* 176. 50′, *cuius* 199847 *est Si. versus.*

Pro Versilogarithmis.

Si quis velit alicuius Versilogarith. arcũ, addat illi Log. graduum 30, qui est 969897, & summæ dimidium, vt Log. dabit arcum, cuius duplum erit arcus quæsitus. *Vt si sit Vers.* 962984, *adde illi* 969897 *fit* 1932881, *cuius dimidium* 966440, *vt Log. dat arcum gr.* 27. 30′, *cuius duplum gr.* 55. 0′ *est arcus quæsitus.*

Pro arcu Sinus 2, *Ta.* 2, *Log* 2, *&c. inueniendo.*

Denique si quæratur arcus alicuius Sinus 2, vel Ta. 2, &c. aut Log. 2, Mes. 2, &c. expeditius erit quærere arcum proprium illius Si. vel Ta. &c. aut Log. Mes. &c. cuius deinde comp. erit arcus quæsitus. *Vt si detur Si.* 2 *ex gr.* 48463, *huius tanquam Sinus quære proprium arcum (vt supra didicisti) gr.* 28. 59′. 17″, *cuius comp. gr.* 61. 0′. 43″ *est arcus quæsitus. At si dati Si.* 2, *vt eiusdem* 48463 *sit capiendus arcus quadrante maior, inuento vt supra illius proprio arcu gr.* 28. 59′. 17″, *eiusq; comp. gr.* 61. 0′. 43″, *hic non erit quæsitus arcus, sed huius comp supplementum, nempè arcus gr.* 118. 59′. 17″. *Hic idem verò etiam resultat si proprius arcus gr.* 28. 59′. 17″ *quadrante augeatur, fient enim pariter gr.* 118. 59′. 17″, *& est facilius. Res eodem modo in Log. ac reliquis procedit.*

Pro Si. 2, *vel log.* 2 *arcus quadrante maioris.*

PROBLEMA TERTIVM.

Dati Numeri absoluti Logarithmum è Chiliade excerpere.

Pro numeris infra 1000.

SI datus Numerus non excedat 1000, vt si sit 427, eum quæres in columnis Numerorum Chiliadis, & è regione ipsius inuenietur in adiacente ad dexteram Logarithmorum columna Log. illi congruens 26304279, seu pauciorum si vis notarum, vt 263043.

Pro numeris supra 1000.

At si excedat 1000, si non sit integer, sed ex integro, & fractionibus decimis constãs, dele punctum separans fractiones decimas, vt sit tibi tanquam integer, vt si sit 2547. 82, cuius sit quærendus Log. dele punctum, vt sit tibi velut numerus integer 254782. Deinde puncto iterum ipsum frangendo ad dexteram tot notas separabis sic 254. 782, vt reliquus 254 non excedat 1000, sicut & in ijs, qui integri proponuntur pariter facies. Capto ergo ex Chiliade Log. ipsius 254, qui erit 240483, accipe quoq; sequentem Tabulæ differentiam 171 (vnitate in hoc casu auctam propter 65 relictas notas dimidium vnitatis superantibus) quam sic

ad Regulam Trium aduptabis. Cum enim in tuo numero superstint $\frac{782}{1000}$ tot millesimas ipsius differentiæ 171 sumere debes. Dic ergo si 1000 dant differentiam 171, quotam eius partem dabunt 782? Ductis igitur 782 per 171, & producto 133722 diuiso per 1000 (quod fit abscindendo ad deteram puncto tres notas) inuenies quotientem 133. 722, hoc est (pro fractione 722 vnitate integro 133 addita) quotientē 134, qui additus inuento prius Log. 240483 dabit Logar 240617 numeri 254.782 ex integro 254. & fractione 782 constantis. Verum quia tibi propositus numerus verè est 2547. 82, propterea aliqua est adhibenda correctio in dicto Logarithmo, eius tamen prima tantum nota ad sinistram est corrigenda, cuius talis erit Regula. Considera quot notas habeat tuus integer numerus, & tot vnitates, vna minus; debet habere prima ad sinistrā nota Logarithmi eidem respondentis, quæ dici solet Logarithmi Caracteristica, reliquæ verò notæ non mutantur. Vt cum in dicto numero proposito 2547. 82 integer 2547 constet ex 4 notis, numerus 3 erit prima nota Logarithmi eidem respondentis, quare mutata nota 2 in 3, inueniemus tandem ipsius 2547. 82 Log. esse 340617, cuius quinq; posteriores notæ post 3 sunt eædem, ac ipsius. Hac ergo ratione cuiuscunq; numeri siue integri, siue ex integro, & fractionibus decimis constantis cōgruum Logarithmum adinuenies. Vt pro numero 7. 3, quæres Log. eius decupli, nempè numeri integri 73, qui est 186332, in quo tamen Caract. 1 mutanda est in, 0, quia numerus integer est tantum vnius notæ, nempè 7, & fiet 086332 Log. numeri 7.3. Pari ratione pro 57.3 quères Log. numeri 573, qui est 275815, at pro 57.3. (mutata Caract. 2 in 1) erit 175815. Et sic in reliquis semper efficies.

Ad horum rationem intelligendam scias inueniri prius Log. ipsius 254, & pro relictis fractionibus decimis 782 sumi partem proportionalem, hoc est tot milleſimas differentiæ subsequentis, quia & Logarithmi, & numeri ibi ferè proportionaliter augentur, vt in progressu differentiarum Chiliadis cernere potes, quæ ferè sunt æquales, præterquam ad initium eiusdem Chiliadis: & propterea pro 7. 3 in margine dixi quærendum esse 73, quia 7. 3 esset quærendus in principio Chiliadis, vbi propter differentiarum magnam inæqualitatem pars proportionalis aliquantulum deficit à vero. Vt verò rationem Regulæ mutandæ Characteristicæ Logarithmorum pariter intelligas, scias totum negotium pendere ex Logarithmo numeri 10, qui est 100000 relictis duabus ciphris, ostendens tot proportionculas interponi in serie infinita, dicta Num. 25. prælud. inter vnitatem, & 10; & consequenter proportionem quamcunque decuplam (quia erit æqualis proportioni ipsius 10 ad 1) importare 100000 proportionculas. Ergo si habeamus ex gr. Logarithmum numeri 7, qui est 084510, & velimus Log. decupli, nempè 70, addemus illi Log. Denarij 1 nempè 100000, seu Carac. 0 in 1 commutabimus, & fiet numeri 70 Log. 184510, indicans inter 1, & 70 interjici, vltra 84510 proportionculas, quæ cadūt inter 1, & 7, alias 100000, nempè inter 1, & 70, proportionculas cadere 184510. Eadem ratione si huic iterum addamus Log. Denarij 100000, seu aliam vnitatem in Carac. fiet 284510 Log. numeri 700 prioris 70 decupli, seu ipsius 7 centupli. Sic addita alia vnitate, fiet Log. ipsius 7000; & sic deinceps &c. Ex quo patet cum numerus datus est vnius notæ, vt 7, Carac. esse, 0, cum est duarum notarum, vt 70, Carac. esse 1, cum trium, vt 700 esse 2, cum quatuor, vt 7000, esse 3, & sic deinceps semper erit Carac. tot vnitates, vna minus, quot erunt notæ in proposito numero, reliquæ verò Logarithmi notæ immutatæ remanebunt. E contra si à dati numeri Log. vt ab ipso 384510, qui est Log. numeri 7000, auferatur 100000, seu vnitas à Carac. 3, remanebit 284510, cum ijsdem reliquis notis, Logarithmus numeri subdecupli eiusdē 7000, nempè ipsius 700, & sic deinceps descendendo versus vnitatem &c. habebitur Log. subcentupli, 70, & submillecupli 7 eiusdem 7000, ablatis à Caræc. continuò vnitatibus. Res eodem modo procedit in integris, & fractis, vt in proposito numero 2547. 82, cuius est centuplus 254782 (si punctum remoueatur, quod ex hoc cognoscēs, quia si 2547. 82 multiplicetur per 100 iuxta Num. 23 prælud. fiet numerus 254782) vnde si posset haberi in Chiliade ipsius 254782 Logarithmus, in eius Carac. duæ vnitates essent posteà minuendæ; sed quia in Chiliade non sunt tam magni numeri, ideò puncto separatis tribus notis, vt sit 254. 782, nempè eo diuiso per 1000, inuenitur vt supra eius Log. 240617; cum verò 2547. 82 sit tantum diuisus per 100, erit 254. 782 subdecuplus ipsius 2547. 82, & ideò aucta vnitate in Carac. Log. 240617, fiet Log. 340617 congruens ipsi 2547. 82, scilicet, Carac. erit 3, cum nempè in eo sint 4 notæ 2547 integrum numerum constituentes; cum enim fractiones decimæ non promoueant numerum in altiorem proportionem decuplam, ideò Carac. non augetur, vel imminuitur nisi pœnes notas integri numeri. Sic pro 7. 3 quæritur Log. 73. eius decupli, qui est 186332, sed mutata Carac. 1 in, 0, fit Logar. 086332 subdecupli ipsius 73, nempè ipsius 7. 3. Eadē ratione Log. numeri 573, qui est 275815, est etiam Log. subdecupli, nempè ipsius 57. 3, mutata Carac. 2 in 1, hoc est ipse 175815. Et sic in cæteris quibuscunq; res se habebit. Hinc insuper innotescit, cum numerus est plurium

Ex Arithmetica vulgari.

Regula Characteristicæ Logarithmorum summè notanda.

Expedit ex gr. pro 7. 3 quærere in Chiliade 73, quia in principio Chiliadis pars proportionalis, quæ esset sumenda pro $\frac{3}{10}$ aliquantulum deficit à vero.

Quot sunt vnitates in Carac. Logarithmi cuiuscunq; tot decuplæ proportiones integræ cadunt inter numerū absolutum dicti Logarithmi, & vnitatem, & tot quoq; notas post primam habet consequēter idem numerus, ex quo Regula tradita circa Carac. Log. est manifesta.

Carac. Logarithmorū non respicit fractiones decimas,

quam decem notarum, quod tunc eius Log. Carac. duplici nota scribitur, est enim vel 10, vel plusquam 10. Talem verò Carac. habent Logarithmi Tangentium supra gr. 45, & omnium Secantium, quæ perueniunt vsq; ad 14 vnitates, vt in Canone ad gr. 89. 59'. 50'' in eius arcus Tang. & Sec. videri potest. Talem habet & Radij Logar. 10, 0000000, cuius Carac. est 10, & ideò Radius deberet esse 1, 00000, 00000, vt est in Canone Rhetico, & consequenter Si. Ta. & Se. tribus notis longiores esse deberent, relatiuè ad eorundem Logarithmorum Carac. vt Num. 27 Prælud. dicebatur: verum quia nullum incommodum calculis hinc oritur, propterea sic in Canone positi fuerunt.

Logarithmi ipsius Radij, Carac. est 10, quem idcirco virgula separaui.

PROBLEMA QVARTVM.

Dati Logarithmi numerum absolutum in eadem Chiliade inuenire.

Pro Logarithmis tabulatis.

DATVS Log. in Chiliade quæsitus, ibiq; repertus dabit in columna numerorum ad sinistram illi adiacente, numerum eidem Log. respondentem. Vt si sit 209691, numerus respondens erit 125: si 149136 erit 31. At si non reperiatur in eadem, mutata semper tui Log. Carac. in 2, illum quæres, & si non inueneris, capies pro eo propinquiorem, eiusque numerum. Vel exactius operando, proximè minorem Tabulæ demes ex tuo Log. & cum relicta differentia, ac differentia Tabulæ subsequēte partem proportionalem venaberis, iungendam numero respondenti proximè minori, vt numerum obtineas quæsitum, sicut in hoc Exemplo. Dati Log. 575489 numerum agnosco ex Carac. 5 debere esse 6 notarum, mutata ergo Carac. 5 in 2, pro eo quæro 275489, quo proximè minorem inuenio 275435, qui dat numerum 568, deficientibus adhuc à quæsito numero tribus notis, quas sic inquiro. Ex Chiliade capio sequentem differentiam 76, ac dempto 275435 ex 275489, remanet minor differentia 54. Deinde dico vt 76 ad 54, ita 1000 (propter tres notas, quæ desunt, nempè generaliter ita 1 cum tot ciphris, quot sunt deficientes notę) ad 711 notas ipsi 568 subiungendas, vnde numerus Logarithmo 275489 correspondens est 568.711. Sed qui respōdet Logarithmo 575489 est illius millecuplus, id est ter decuplatus, propter tres vnitates, quibus Carac. 5 superat Carac. 2: ergo cum 568711 sit millecuplus ipsius 568.711, sufficit in hoc auferre punctum, & remanebit 568711 numerus sex notarum Logar. 575489 correspondens. Si vero Logar. 275489 inuentus fuisset præcisè in Tabula pro tribus deficientibus notis, tres ciphræ fuissent subiungendæ. Eadem ratione pro Log. 027472, quæsito 227472, habebis numerum (si pro eo sumas proximè minorem 227416) 188, sed quia Carac. 0. deficit à 2 duabus vnitatibus, propterea eius subcentuplus 1.88 est numerus Logarithmi 027472. Et hæc omnia sic fieri debent, vt semper inter Carac. vnitates, & notas quæsiti numeri dicta concordia conseruetur.

Pro non tabulatis.

Pars proportionalis inquiritur ferè, vt in Prob. 2 circa arcus.

Ex Arith. vulgari.

Iuxta Regulam Carac.

PROBLEMA QVINTVM.

Regulam Trium absoluere.

SINT trium arcuum, vel angulorum, vt, A, B, C, Sinus, E, F, G, è Canone extracti iuxta Prob. primum, quibus sit inueniendus quartus Sinus proportionalis, H, eiusq; arcus, vel angulus, D. Ducemus ergo, F, in, G, & productum, P, diuidemus per, E, & fiet, Q, quotiens, seu (relicta fractione, & pro ea addita ipsi quotienti vnitate) fiet, H, qui in Canone quæsitus inter Sinus iuxta Prob. 2. dabit arcum, seu angulum, D, quæsitum.

At per Log. vice Sinuum accipiemus in eodem Canone iuxta Prob. 1. ipsorum, A, B, C, Log. I, K, L. Et quia ex dictis Num 25 prælud. si 4 numeri sint proportionales, summa Logarithmorum extremorum, est æqualis summæ Logarithmorum mediorum, ideò facta summa, M, Logarithmorum, K, L, ab ea subtrahemus Log. I, & remanebit Log. N, qui iuxta Prob. 2. quæsitus in Canone inter Log. ostendet in columna Sinuum eidem congruum Sinum, H, seu (si negligatur Sinus) in columna laterali arcum, aut angulum, D. Manifestum est ergo, H, esse trium, E, F, G, quartum proportionalem, quia summa eorundem Log. I, N, æquatur summæ, K, L: vnde, H, erit Sinus, &, D, arcus, seu angulus quæsitus: & hoc ex dictis Num. 25 prælud. innotescit.

Primus modus per multiplic. & diuisionem.

Ratio huius modi elicitur ex prop. 19, & 20 Septimi Elem.

Secūdus modus per additionem, & subtractionē Logarithmorum, in eorūdem vsu generalis, ac consuetus; quo, relicto tertio subsequenti, quisq; prolibito etiā uti poterit.

	Gr.	Per multiplic. & diuisionẽ.		Per additionẽ, & subtract.		Per simplicem additionem.
A.	80. 18 Si.	E. 98570	Log.	I. 999375	To.2.	O. 1000025
B.	75. 42 Si.	F. 96902	Log.	K. 998633	Log.	K. 998633
C.	30. 15 Si.	G. 50377	Log.	L. 970224	Log.	L. 970224
D.	29. 41 Si.	H. 49525		M. 1968857		R. 2969482
			Log.	N. 969482	Log.	N. 969482
P.	4881632054	Q. 49524 $\frac{51374}{98570}$				

Deniq; per simplicem additionem idem haberi potest. Ad cuius intelligentiam considerandum est, quod si, vbi est Logarithmus, I, ex, M, subtrahendus, ille non subtrahatur, quin potius eidem, M, seu ipsis, K, L, addatur numerus, quo ipse Log. I exceditur à Radij duplo Logarithmo, qui est 2000000 (quòd voco residuum Logarithmi, I, habeturq; subtrahendo ipsum Log. I ex 2000000) nempe addatur 1000625: tunc vt restet Log. N, nedum ex dictorum trium facta summa erit subtrahendus Log. I, sed etiam tale residuum 1000625 (qui simul faciunt 2000000) nempè ex eadem summa, erit demendus 2000000, & sic remanebit idem Log. N, qui prius habebatur, subtrahendo Log. I, ex, M. At ipse 2000000 facilè subtrahitur, si tantum vltimo loco ad sinistram nota 2, seu Binarium aut prætermittatur, aut, si scribitur, deleatur in facta summa, cum ciphræ non alterent eiusdem summæ notas: ergo tali ratione per simplicem additionem residui Logaritgmi ipsius, I, nempe numeri 1000625 facta cum, M, seu immediatè cum Logarithmis, K, L, idem Log. N, haberi potest. *Vt in tertio superiori calculo videre licet, in quo si numerum, O, 1000625 addas cum, K, L, sit summa idem Log. N, prætermisso tamen dicto Binario, quod vltimo ad sinistram loco venit.*

Considerandum est insuper in Logarithmis Canonis hanc esse proprietatem, vt cuiuscunq; arcus Log. & Tom. 2 simul additi componant duplum Logarithmi Radij, hoc est 2000000. Seu eiusdem Logar. 2. ac Tom. aut Mes. & Mes. 2. *Vt graduum* 20. 47' Log. 955003, *& To.* 2, *qui est* 1044997, *faciunt* 2000000: *sic* Log. 2, *qui est* 997078, *& Tom.* 1002922: *ac Mes.* 957925, *cum Mes.* 2, *qui est* 1042075, *pariter faciunt* 2000000.

Hæc ergo proprietas merè nobis optatum Logarithmorum residuum suppeditare potest, vt vel hoc solo fine Tomologarithmos, alias non necessarios, in Canone duxerim retinendos. Volens enim ex gr. residuum Log. I, non est opus ipsum, I, subtrahere ex 2000000 (vt in Vers. & Logarithmis Chiliadis facere opus erit) sed illud habetur in, O, Tom. 2 eorundem graduum, A, quorum, I, est Log. Etenim vides ex, I, &, O, fieri 2000000, vnde si pro, I, subtrahendo addas ipsum, O, cum, K, L, & à summa, R, auferas 2000000, seu dictum Binarium proueniens vltimo loco ad sinistram, remanebit vt supra dicebatur Log. N, idem, qui per additionem, & subtractionem iuxta secundum calculum habebatur.

Quoniam autem in Regula Trium absoluenda non semper soli Sinus, sed & Tang. ac Sec. Si. versi, & numeri absoluti mixtim interuenire possunt, & consequenter non soli Sinuum Logarithmi, sed & aliarum linearum, ac numerorum absolutorum: quorum quilibet poterit in primo loco Regulæ reperiri, propterea in sequenti Tabella declaratur pro quouis Logarithmo subtrahendo, quis vice illius sit addendus. Ex eadem ergo intelligitur, si in Regula Trium alicuius arcus, vel anguli, vt A, debeat in primo loco poni Log. vt, I, subtrahendus ex summa Logarithmorum secundi, & tertij arcus, seu anguli, B, C, vt contigit in superiori calculo, quod pro eo substituendus est Tom. 2, vt, O, eiusdem, A, addendus eisdem secundi, & tertij Logarithmis. Et si ibi ponendus esset ipsius, A, Log. 2 subtrahendus, pro eo substitueretur Tom. eiusdem, A, addendus. Et ita pro Mes. Mes. 2, & pro Mes. 2 Mes. &c. accipiendus esset. Pro Vers. autem, & numeris absolutis debet prius Vers. seu numerorum Log inueniri iuxta Problema primum, & tertium, illeq; subtrahi ex 2000000, cuius residuum erit addendum. Vlterius cum residuum Log. Radij ad 2000000 sit 1000000, quotiescunq; Radius sit in primo loco, esset addendum hoc eius residuũ, & ex summa Binarium auferendum, at melius erit si pro eo addes ciphram, seu nihil, & ex summa tunc auferas tantum vnitatem. Caterum ipsa Regula Trium quoad reliqua iuxta superius exemplum in omnibus absoluetur. Porrò sciat Lector Epilogi vltimo loco positi Regulas iuxta hunc tertium modum fuisse concinnatas, vt omnes Trigonometriæ operationes ad simplicem additionem reducerentur. Et tandem recordetur eadem intelligenda esse, si Logarithmi Canonis sumantur plurium, vel pauciorum notarum, vt ex. gr. ad Radij Logar. 10, 0000000, tunc enim residuum Logarithmorum capietur non ad 2000000, sed ad 200000000, & sic &c.

In meo Direc. vocaui hoc residuum ad 2000000 complementum arithmeticum maius: sicuti res. ad 1000000 cõp. ar. minus.

Tertius modus per simplicem additionem Logarithmorum, quem in omnibus exẽplis infra vsurpamus.

In Regula Trium, facta summa Logarithmorum vltimo loco ad sinistram Binarium est prætermittẽdum.

In Canone duorum arcuũ quadrantem implentium, vnius Log. & Tom. alterius (vt & eorum Mes. logarithmi) simul additi faciunt semper duplum Logar. Radij, hoc est 2000000.

Tabella commutationis cuiusq; Logarithmi subtrahẽdi (quia sit in primo loco Regulæ Trium) in Logarithmum, seu residuum addendum.

Congruit à prædictis excipere Radiũ, eiusq; Logarithmi, qui est 1000000 sumere residuum ad eũdẽ 1000000, nẽpè pro eius residuo sẽper ponere ciphram, & in summa delere pro Binario tantum vnitatem; & hoc propter eius in calculis creberrimum vsum.

Tabella commutatiua Logarithmi cuiuſuis ſubtrahendi in Logarithmum, ſeu reſiduum addendum in praxi Regulæ Trium.

Si alicuius arcus, aut anguli ſit ſubtrahendus	*Adde eiuſdem*
Logarithmus	*Tomologarithmum* 2.
Log. 2	*Tom.*
Meſ.	*Meſ.* 2
Meſ. 2	*Meſ.*
Tom.	Log. 2
Tom. 2	Log.
Aut Verſ. ſeu Verſ. 2, *vel Numeri abſoluti* Logar.	*Reſiduum ad* 2000000: Et pro his omnibus dele in ſumma Binarium vltimo loco ad ſiniſtram
Aut Radij Logar.	*Semper Ciphram:* & tunc in facta ſumma dele tantum Vnitatem.

HIs animaduerſis, ſi Lectorem piget ſequentia percurrere, ſaltem videat Definitiones Trigonometriæ ſphæricæ, & deinde ſe conferat ad Regulas Epilogi exercendas, hæc enim etiam ſufficere poſſunt.

SVperioribus verò perceptis, nobis ad rem propius accedentibus nunc videndum eſt quomodo hucuſq; tradita propoſitis quibuſcunque triangulis applicentur: quod per ſequentia Axiomata, ac Problemata prius in Triangulis rectangulis, & poſtmodum in obliquangulis licebit intelligere.

Axioma primum Planorum lineare.

IN Triangulis planis rectãgulis vnumquodq; latus pro Radio poni poteſt, ad Canonem Trigonometricum conuenienter.

Si ergo Hypotenuſa ponatur pro Radio, crura euadunt Sinus oppoſitorum ipſis acutorum.

Si vero alterum crurum ponatur pro Radio, reliquũ crus eſt Tangens, & Hypotenuſa Secans anguli ex adueꝛſo Tangentis conſtituti.

Demonſtratio.

Qui ignorat Euclidis Elementa demõſtrationes prætereat, ſine quibus calculi praxes intelligi poſſũt.

SIt in ſeptima figura propoſitum quodcunq; triangulum, A C B, rectum habens angulum, vt, A B C; centro vero, A, & interuallo hypotenuſa, A C, deſcribatur, E F, arcus, qui ſit quarta circuli pars, terminans ad productam, A B, in, F, & ad, A E, ipſi, C B, æquidiſtanter ductam, vt in, E; ſitq; etiam ducta, C D, parallela ipſi, A F. Manifeſtum eſt ergo ex definitione Radij, & Sinus, Num. 19, & 20 præludiali tradita, A C, hypotenuſam pro Radio poſitam fuiſſe; reliquorum verò laterum, ſeu crurum, C B, B A, ipſum, C B, eſſe Sinum arcus, C F, & conſequenter eſſe Sinum ſubtenſi eidem anguli, C A B: ſimiliter &, C D, eſſe Sinum arcus, E C, & ſubinde ipſum, vel ipſi æqualem, A B, eſſe quoq; Sinum anguli, E A C, vel anguli, C A B, illi coalterni, & ideò

34 *Primi Elem.*

29 *Primi Elem.*

æqualis: hoc est quia, A C, hypotenusa posita est pro Radio, crura, C B, B A, fiunt Sinus oppositorum ipsis angulorum acutorum, A, C, vt prior pars Axiomatis docet. Quod si, vt in figura 8, eiusdem trianguli, A B C, centro, A, & interuallo, A B, crure maiori hoc est ad Radium, A B, describatur arcus circuli, B F E, fit, B C, Tangens, &, A C, Secans arcus, F B, seu anguli, A, minoris acuti. Vel si ad Radium, C B, crus minus fiat arcus circuli, B F E, vt in figura 9, euadit, B A, Tangens, &, C A, Secans arcus, F B, seu anguli, C, maioris acuti: & hoc per definitiones Tangentis, & Secantis, quæ habentur Num. 15, & 16 præludiali; quod est posteriori Axiomatis parti conforme. Patet ergo veritas Axiomatis quoad vtramq; partem.

Ex def. Tăg. & Sec. Num. 15. 16 prælud.

PROBLEMA SEXTVM.

In quocunq; Triangulo rectangulo, datis angulis, laterum proportiones manifestare.

NOTA prius in triangulo rectãgulo dato vno acutorum, vt gr. 20, dari & reliquos duos angulos: quia cuiuscunque trianguli tres anguli æquantur duobus rectis, seu gradibus 180, vnus autem reliquorum est rectus, hoc est gr. 90, & subinde datus, ergo reliqui duo facient gr. 90, quorum vnus ponitur datus, nempè gr. 20, ergo & reliquus acutus erit datus, hoc est gr. 70 prædicti complementum.

32 *Primi Elem,*

Esto igitur in fig. 7 idem triangulum, A B C, in quo angulus, C A B, sit gr. 28. 15'; erit subinde reliquus acutus, A C B, eius comp. gr. 61. 45', &, A B C, rectus est gr. 90. Nunc his datis oportet manifestare proportionem, quam habebunt, A C, A B, B C, inter se, quod ex numeris Canonis sic obtineri poterit. Iam scis eosdem cuicunq; circuli siue parui, siue magni Radio, ac Sinibus, Tangentibus, & Secantibus conuenire iuxta dicta Num. 20 prælud. Etsi enim Radius siue paruus, siue magnus supponatur particularum 10000000, seu 100000, ille tamen particulæ in Radio, Si. Ta. & Se. parui circuli paruæ erunt, & in magno magnæ. Cum ergo in triangulo, A B C, ponatur, A C, tanquam Radius, iam intelligis iuxta nostrum Canonem ipsum, A C, æqualem Radio, A F, esse particularum 100000 Sinum nempè gr. 90. Quoniã verò ex dictis, C B, est Sinus anguli, A, gr. 28. 15', ideò si in Canone quæratur Sinus graduum 28. 15', ille inuenietur esse earũdem particularum 47332 vnde, C B, erit 47332, qualium est, A C, 100000. Eadem ratione cum angulo, C, gr. 61. 45' (qui est in eadem linea è regione gr. 28. 15' sed in altera facie, quippe qui est eius comp.) reperietur Sinus, A B (quia æquiualet ipsi, D C) earũdem particularum 88089. Alio modo potest haberi eorundem laterum proportio iuxta fig. 8. Etenim cum crus maius, A B, in eodem triangulo, A B C, ponatur pro Radio, illud erit 100000, B C, verò Tangens anguli, A, gr. 28. 15' erit 53732, & Secans, A C, 113521 earundem particularum. Et tandem iuxta fig. 9, erit, C B, Radius 100000, ac, B A, Tangens anguli, C, graduum 61. 45' inuenietur 186109, &, C A, eiusdem Secans 211274. Tripliciter ergo, datis angulis, habetur ratio laterum, prout singula latera pro Radio substituuntur, vt hic patet, nempè

Primus modus inquirendi proportionem laterum in triangulis rectangulis.

Secundus modus.

Tertius modus.

Canon triangulorũ aptatur cuicunq; circulo, siue paruo, siue magno: & subinde cuicunq; triangulo &c.

Vel sic in fig. 7. — Proportiones laterum.

Iuxta primũ modum.

A C, Radius æqualis Sinui graduum 90	100000
C B, Sinus anguli, A, gr. 28. 15', *nempè*	47332
A B, Sinus anguli, C, gr. 61. 45', *nempè*	88089

Vel sic in fig. 8.

Iuxta secundum.

A B, Radius, & Sinus graduum 90	100000
B C, Tangens anguli, A, gr. 28. 15', *nempè*	53732
A C, Secans anguli, A, gr. 61. 45, *nempè*	113521

Vel sic in fig. 9.

Iuxta tertium.

C B, Radius, & Sinus graduum 90	100000
B A, Tangens anguli, C, gr. 61. 45', *nempè*	186109
C A, Secans anguli, C, gr. 61. 45, *nempè*	211274

PROBLEMA SEPTIMVM.

In quocunq; triangulo rectangulo, dato præter angulos vnico latere in quauis ſuppoſita menſura, in eadem reliqua duo ignota latera nota reddere.

Pone ſemper pro Radio latus datum. Vſus Regulæ Triũ in triãgulis rectangulis.

PRIVS iuxta Problema antecedens quære proportionem illorum duorum laterum, quorum vnum datum habes, & aliud quæris, & nota eorundem numeros è Canone extractos, qui expriment talem proportionem: congruet autem calculi facilitati ponere ſemper pro Radio, ſeu tanquam 100000 ipſum latus datum. Deinde per Regulam Trium iuxta Prob.5 vel per lineas, vel per Logarithmos inſtitutam, fac vt numerus tabulatus (quem ex Canone deſcripſiſti) dati lateris ad numerum eiuſdem dati, ſed in aſſumpta menſura extra Canonem, ita numerum tabulatum lateris quæſiti ad quartum, qui erit numerus lateris quæſiti in eadem menſura extra Canonem aſſumpta.

Vt ex.gr. eſto in fig.7 planum accliue, cuius rectitudo accliuitatis ſit, AC, eiuſq; angulus inclinationis ſuper horizontẽ ipſe, CAB, gr.23. 12', velit autem quis ſcire cum ab, A, progreſſus fuerit ſuper, AC, pedes ex.gr.150, vt vſque in, C, quanta tunc erit eius altitudo ſuper planum horizontale, AF, & ipſius diſtantia horizontalis ab, A, nempè quot pedes ſit, CB, &, BA. Quia ergo, AC, hypotenuſa ponitur eſſe p.150, ipſam quoq; ponemus pro Radio, intelligeturq; in Canone eſſe 100000, vnde iuxta priorem partem Axiomatis, CB, erit Sinus anguli, A, gr.23.12, hoc eſt 39394, qualium, AC, eſt 100000; eiuſq; Log.959543, &, BA, Sinus comp. ipſius, A, nempè Sinus anguli, C, gr.66.48', qui eſt 91914 eiuſq; Log.996338, ergo vt ex dato latere, AC, p. 150 notificemus pedes ipſius, CB, ſic inſtituetur Regula Trium tam per lineas, quam per Log. iuxta tertium modum Prob.5, inuenieturque, CB, eſſe pedes 59.091.

Poſſet etiam iuxta 16 Quinti Elem. hoc eſt permutãdo, fieri vt, AC, Radius ad, CB, Sinũ ipſius, A, ita, AC, data, ad, CB, datã, & eodẽ modo in cæteris analogijs, at in ſequentibus prior modus retinebitur.

In fig.7	*Per lineas*		*Per Logarithmos*	
Vt, AC, Radius, ſeu gr.90 Sinus, ſemper datus	100000	*r l*	0	
Ad datam, AC, pedes	150	*l*	217609	
Ita, CB, tanquam anguli, A, gr.23.12' datus Sin.	39394	*l*	959543	
Ad quæſitum, CB, pedes	59.091	*l*	177152	*dat p.59.1*

Et nota per lineas multiplicatum fuiſſe 150 cum 39394, & productum 5909100 diuiſum fuiſſe per 100000 (quod compendiosè fit puncto ſeparando ad dexteram quinq; notas) & ſic prouenijſſe quæſitum, CB, p.59.091 relictis vltimis ciphris. Per Logar. verò p. o Reſ Log. (quod notatur per, r l.) poſita eſt ciphra iuxta monitum Tabellæ Prob.5; pro numero 150 poſitus eſt Log. 217609, è Chiliade extractus iuxta Prob.3; pro Sinu graduum 23.12' poſitus eſt Log. 959543, è Canone excerptus iuxta Prob primum; & illi additi in vnam ſummam iuxta Prob.5 dederunt 1177152, at iuxta idem monitum prætermiſſa eſt vnitas, quæ veniebat vltimo loco ad ſiniſtram, remanſitq; Log. 177152, cui in Chiliade quæſito iuxta Prob.4, vt 277152 mutata Carac.1. in 2 inuentus eſt reſpondere numerus 591, ſed propter Carac.1, puncto vna ad dexteram ſeparata nota, numerus dicto Logar. congruus fuit p.59.1 nempè, CB, quartus proportionalis quæſitus, idem ferè ei, qui per lineas inuentus eſt.

Per dicta Prob. 3 circa Regulam Carac. Log.

Pro ipſa verò, AB, in pedibus pariter notificanda, ſic Regula Trium inſtituetur, & ipſa, AB, inuenietur eſſe p.137.871.

In fig.7	*Per lineas*		*Per Logarith.*	
Vt, AC, Radius	100000	*r l*	0	
Ad datam, AC, pedes	150	*l*	217609	
Ita, AB, tanquam anguli, C, gr.66.48' datus Sinus	91914	*l*	996338	
Ad quæſitam, AB, pedes	137.871	*l*	213947	*dat p.137.870*

Iuxta Prob. 4

Hic in Chiliade quærentes Log. 213947, inuenimus proximè minorem 213672 dantem p. 137. & cum differentia 316 ſubſequenti, ac minori differentia 275 (nempè quæ eſt inter 213672 proximè minorem tabulatum, & noſtrum 213947) ductam per 1000 (vt haberemus tres noeas poſt punctum) prouenerunt fractio decimæ 870, vnde, AB, per Log. inuentus quoq; eſt p. 137. 870, ſeu p. 137. 87, ferè vt per lineas.

Nempè factũ eſt vt 316 ad 1000, ita 275 ad 870.

Si verò latus datum eſſet alterum crurum, inuenta vt ſupra ratione laterum, eodem modò inſtitueretur Regula trium pro reliquis lateribus notificandis.

Vt in fig. 8 eſto, AB, diſtantia horizontalis oculi, A, ab alicuius Aedificij altitudine, CB, p. 200, &, A, angulus altitudinis illius verticis, C, gr. 15. 37': libeat autem ſcire tam, CB, quam, AC. Cum ergo ſit datum crus, AB, p. 200, ipſum quoq; relatiuè ad Canonem ponemus pro Radio, ſeu 100000, eritq; per poſteriorem partem Axiomatis, BC, Tangens anguli, A, gr. 15. 37', nempè 27952, ac Meſ. 944641, &, AC, eiuſdem Secans 103833, & Tom. 1001634: ergo Regulam Trium tam pro venando, BC, quam, AC, ſic inſtituendo, inuenietur, BC, p. 55. 904, &, AC, ped. 207. 666.

In fig. 8	Per lineas		Per Logarithmos	
Vt, AB, Radius	100000	r l	0	
Ad datam, AB, pedes	200	l	230103	
Ita, BC, tanquam anguli, A, gr. 15. 37' data Tangens	27952	m	944641	
Ad quæſitam, BC, pedes	55. 904	l	174744	dat p. 55. 904

Deinde.

In fig. 8	Per lineas		Per Logarithmos	
Vt, AB, Radius	100000	r l	0	
Ad datam, AB, pedes	200	l	230103	
Ita, AC, tanquam anguli, A, gr. 15. 37' data Secans	103833	t	1001634	
Ad quæſitam, AC, pedes	207. 666	l	231737	dat p. 207. 670

Notas in calculis breuiſſimas vſurpamus, nempè, l, pro Log. m, pro Meſ. &, t, pro Tom. r l, pro Reſ. Log, l 2, pro Log. ſecundo, m 2, pro Meſ. ſecundo, &, t 2, pro Tom. ſecundo, iuxta Num 28 præludialem. Eodem verò modo ex dato crure minori, CB, & angulo, C, argueremus tam, BA, quam, CA, iuxta fig. 9. Hoc eſt ex dato quouis trianguli, ABC, latere in fig. 7, 8, & 9, reliqua duo ſic in eadem menſura notificabuntur.

PROBLEMA OCTAVVM.

In quocunq; triangulo rectangulo, datis duobus quibuſcunq; lateribus in quauis menſura, angulos, & ſubinde tertium latus in eadem menſura notificare.

ALTERVM datorum pone pro Radio, ipſumq; ſtatuę tanquam datum in primo loco Regulæ Triũ, in ſecundo pone idem tanquam Radium, & in tertio loco reliquum latus datum, abſolutaque Regula vel per lineas, vel per Log. habebis quartum, qui erit Sinus anguli oppoſiti, ſi latus poſitum pro Radio fuit hypotenuſa: vel Tangens, ſi illud fuit alterum crurum, & reliquum datorum reliquum crus: aut Secans, ſi Radius fuit alterum crurum, & reliquum datorum hypotenuſa, cum quo Sinu, Tang. vel Sec. capies angulum illis congruentem, ex quo reliquum quoq; acutum obtinebis, & ſubinde per Prob. ant. etiam tertium latus notificare poteris.

Hoc elicitur ex præmiſſo Axiomate.

Vt ſi ſit arbor altitudinis pedum 50, cuius verſus verticem pars detruncatur (quam nobis in fig. 7, & 9 referat, AC) p. 30, pars verò relicta ſit, BC, p. 20, & quæratur, AB, diſtantia, quam habebit vertex, A, Terræ pro-

Ex datis hypotenuſa, & altero crurũ, angulos, &

reliquũ crus inuenire.

Nota pedum 30 Log. esse 147712, qui demendus est ex 2000000 dupli Logar. Radij, & restat Res. Log. 1852288 ponendũ in primo loco primi calculi. In facta verò summa Binarium prætermittitur iuxta monitũ Tabellæ Problema. 5. Eadem in posteriori calculo pro sumendo Res. Log. pedum 20 pariter sunt obseruanda iuxta dicta Prob. 5.

cumbens, ab arboris pede, B, sic instituetur Regula Trium, posito alterutro ipsorum, A C, C B, pro Radio, ad inueniendum prius angulos, nempè fiet.

Vel in fig. 7.	*Per lineas*		*Per Logarith.*
Vt data, A C, hypotenusa pedes	30	*r l*	1852288
Ad, A C, Radium	100000	*l*	1000000
Ita data, C B, pedes	20	*l*	130103
Ad, C B, anguli, A, quæsiti gr. 41. 48'. 38'' Sinum	66667	*l*	982391

Vel in fig. 9			
Vt datum, C B, crus pedes	20	*r l*	1869897
Ad, C B, Radium	100000	*l*	1000000
Ita data, C A, pedes	30	*l*	147712
Ad, C A, anguli, C, quæsiti gr. 48. 11'. 23'' Secantem	150000	*t*	1017609

Tandem verò, habito angulo, C, gr. 48. 11'. 23'' per sequentem analogiam inuenitur iuxta Problema anteced. crus, A B, ped. 22. 36080.

In fig. 7.			
Vt, A C, Radius	100000	*r l*	0
Ad datam, A C, pedes	30	*l*	147712
Ita, A B, tanquam anguli, C, gr. 48. 11'. 23'' datus Sinus	74536	*l*	987236
Ad quæsitum, A B, pedes	22. 36080	*l*	134948

Ex 47 Primi Elem. inuenire crus reliquum.

Idem verò, A B, potest haberi, si quadrentur, B C, 20, &, C A, 30, fiatq; quadratum, B C, 400, & quadratum, C A, 900, à quo dempto 400, remanebit numerus 500. cuius radix quadrata erit, A B, p. 22. 36 ferè vt supra. Ergo dictæ arboris vertex, A, distabit ab eius pede, B, p. 22. 36.

Esto nunc in fig. 8, vel 9, C B, altitudo alicuius vmbrosi horizonti perpendicularis, partes 12, quod in ipsius planum projiciat vmbram, A B, partes 28 radio, C A, terminatam, & quæratur quanta sit tunc Solis super horizontem altitudo. Sic ergo instituta Regula Trium angulus, A, altitudinis Solis inuenietur gr. 23. 12'.

Ex datis cruribus inuenire angulos.

In fig. 8.	*Per lineas*		*Per Logarith.*
Vt data, A B, vmbra partes	28	*r l*	1855284
Ad, A B, Radium	100000	*l*	1000000
Ita datum, B C, vmbrosum partes	12	*l*	107918
Ad, B C, anguli, A, quæsitæ altitudinis gr. 23. 12' Tangentem	42857	*m*	963202

Ex datis cruribus inuenire hypotenusam.

Posset etiam vt in fig. 9 poni pro Radio, C B, & vt, C B, p. 12 ad idem, C B, 100000, ita fieri, B A, p. 28 ad, B A, 233333 Tangentem anguli, C, gr. 66. 48', cuius comp. esset, A, gr. 23. 12', vt supra quoq; inuentus est. Porrò si feceris in fig. 8, vt, A B, Radius 100000 ad, A C, Secantem anguli, A, gr. 23. 12', quæ est 108798, ita, A B, p. 28 ad quartum 30. 46, fiet nota, A C, p. 30. 46 iuxta Probl. antecedens. Alio modo si ipsorum, A B, 28, &, B C, 12 quadrata 784, & 144 simul addes, summæ 928 radix quadrata p. 30. 46 erit, A C, pariter vt supra. Et hæc circa rectangula sufficiant, nunc ad obliquangula transeamus.

Idem per radicẽ quadratam iuxta 47 Primi Elem.

Vide Epilogum Regularum pro Planis rectangulis in fine.

Axioma secundum Planorum lineare.

IN Triangulis planis vniuersis latera Sinibus angulorum ipsis oppositorum sunt proportionalia.

Demonstratio.

5 Quarti Elem. ID patet, nam cuilibet triangulo plano potest circulus circumscribi, in quo eius latera fiunt chordæ subtensorum arcuum, quarum medietates sũt Sinus semiarcuum, *Nu. 14 præl.* & ideò sunt etiam Sinus oppositorum angulorum, qui dictis semiarcubus adæquantur: ergo latera, quæ sunt dictorum Sinuum dupla, erunt vt ipsi Sinus oppositorum angulorum.

Elicitur ex 20 Tertij Elem. Vel id in fig. 10, & 11 triangulis, A C H, (quorum angulus, A H C, in fig. 11 ponitur obtusus, & cæteri acuti) sic probabitur. Centris enim, C, H, Radijs æqualibus, C E, H F, describantur arcus, B E, I F, & à punctis, B, A, I, perpendiculares demittantur super, C H (productam in fig. 11) nempè, B D, A K, I G. Est ergo, B D, Sinus anguli, C, &, I G, Si. anguli, H, acuti in fig. 10, *Nu. 14 præl.* & obtusi in fig. 11. Quia vero triangula, B C D, A C K, sunt æquiangula; veluti &, A K H, I G H, eò quod, B D, I G, sint parallelæ ipsi, A K: erit vt, C A, ad, A K, ita, C B, vel illi æqualis, I H, ad, B D; & vt, K A, ad, A H, ita, G I, ad, I H, ergo ex æquali in perturbata analogia, vt, C A, ad, A H, *21 Quinti Elem.* ita erit, I G, ad, B D, & permutando, vt, C A, ad, I G, ita erit, A H, ad, B D, hoc est latera Sinibus oppositorum angulorum erũt proportionalia.

PROBLEMA NONVM.

In triangulis planis vniuersis, datis duobus cruribus, & angulo vni eorum opposito, ac data specie anguli reliquo datorum oppositi, hunc notum reddere, necnon angulum verticalem, & basim.

Iuxta Axioma secundũ. FAC vt crus dato angulo oppositum ad Sinum anguli oppositi, ita crus quęsito angulo oppositum ad Sinum anguli quæsiti, cuius speciem, nempè an sit acutus, vel obtusus non ignoras.

Vt in fig. 12 sint data interualla horizontalia, A B, milliaria 30, &, A C, milliaria 20 loci, A, à locis, B, C, necnon angulus, B, positionis duorum locorum, A, C, gr. 35. 19', & quæratur angulus, C, positionis duorum locorum, A, B, quem supponamus esse acutum. Sic ergo instituta Regula Trium inuenietur, C, esse gr. 60. 7'. Notis, C, &, B, per eorum simul iunctorum subtractionem à gr. 180, emerget, A: Et per sequens Problema etiam interuallum, B C, haberi poterit. Est ergo. *32 Primi Elem.*

In fig. 12.	*Per lineas*		*Per Logarith.*
Vt datum crus, A C, milliaria	20	*rl*	1869897
Ad dati anguli, B, gr. 35. 19' Sinum	57809	*l*	976200
Ita datum crus, A B, milliaria	30	*l*	147712
Ad anguli, C, quæsiti gr. 60. 7' Sinum	86703	*l*	993809

Nu. 14 præl. Cum angulus quæsitus supponetur obtusus, vt in fig. 11 est, A H C, inuento illius Sinu, I G, is in Canone dabit angulum acutum, A H K, cuius subinde suppl. erit angulus, A H C, quæsitus. Scis enim eundem Sinum conuenire dato angulo, & eius supplemento, & propterea, cum, inuento Sinu, sit ambiguum an cum eo sit sumendus obtusus, vel acutus, & cum possit fieri duplex triangulum habens eadem duo data crura, cum angulo vni eorum opposito noto (vt patet in fig. 20, in qua posito quod sint, D T, D H, egualia, si dentur duo crura, C D, D H, cum angulo, C, eadem quoq; data habet triangulum, C D T, sed in, C D H, quęsitus angulus, H, erit acutus, & in, C D T, erit obtusus) quæsiti anguli species quoq; dari debet.

PROBLEMA DECIMVM.

In triangulis planis vniuersis, datis duobus angulis, & crure vni eorum oppositio, reliqua notificare.

Iuxta Axioma 2.

FAC vt Sinus anguli dato cruri oppositi ad ipsum crus oppositum, ita Sinum reliqui anguli dati ad reliquum crus datum.

Vt in fig. 12 sit datum duarum stationum vtcunq; electarum, A, C, interuallum, A C, p. 85, & per instrumentum capiendi angulos, vt per Quadrantem, seu Astrolabium, aut aliud quodcunque sint obseruati in stationibus, A, C, angulus, A, gr. 50. 18', & angulus, C, gr. 70. 45', quorum summa gr. 121. 3' dempta ex gr. 180 relinquet angulum, B, gr. 58. 57'. Si ergo ex notis duobus angulis, B, C, ac crure, A C, ipsi, B, opposito crus, seu interuallum, A B, velimus inuestigare, sic instituetur Regula Trium.

Pro Log. Sinus, B, subtrahendo positus est tom. 2 addendus iuxta Tabellam Prob. 5, dempto in summa Binario &c.

In fig. 12.	*Per lineas*		*Per Logarith.*
Vt dati anguli, B, gr. 58. 57' Sinus	85672	*t 2*	1006716
Ad datum, A C, pedes	85	*l*	192942
Ita dati anguli, C, gr. 70. 45' Sinus	94409	*l*	997501
Ad quæsitum, A B, pedes	93 57269/85672	*l*	197159
Seu pedes	93. 67.		

Fractionem, quę venit in diuisione, commutauimus in fractionem decimam iuxta Num 24 præludialem, quam cum ijsdem pedibus dedit quoq; Log. 197159. Eadem ratione ex notis, A C, crure, & angulis, B, A, notificaretur, B C. Hoc verò Problema est in Altimetria præstantissimum.

Vsus huius Prob. maximus est in Altimetria.

Axioma tertium Planorum lineare.

IN Triangulis planis vniuersis vt summa duorum quorumuis laterum, seu crurum est ad eorum differentiam; ita Tangens dimidij summæ duorum angulorum ad basim, est ad Tangentem differentiæ infra, vel supra dimidium.

Demonstratio.

SInt in fig. 13 triangulum, D B C, in eoque assumpta crura D B, minus, &, B C, maius ac Radio, B D, circulus, A D E F, descriptus, peripheria notans, F, in, B C, &, E, in, D C; extensa verò, C B, in, A, iungatur, A D, & in, S, bifariam secetur, connectaturque, B S, ac ipsi, C D, acta parallela, B K, occurrat ipsi, A D, in, K; & tandem sumatur, S O, æqualis ipsi, S K. Est ergo, D K, ad, K A, vt, C B, ad, B A, & componendo, D A, ad, A K, vt, C A, ad, A B; &, consequentibus duplicatis, DA, ad, AK, cum, O D, vt, C A, ad, A F, & per conuersionem rationis, D A, ad, K O, seu dimidia ad dimidiam, hoc est, A S, ad, S K, vt, AC, ad, C F, seu vt summa crurum, D B, B C, ad eorum differentiam, F C. Cum verò, A S B, sit angulus rectus, in triangulo, AS B, &, K S B; si crus, B S, fiat Radius (nempe centro, B, interuallo, B S, circulus describatur) per Axioma primum ipsæ, S K, S A, euadent Tangentes angulorum, S B K, S BA. Sed, S B A, est dimidium ipsius, A B D, (quia, A B, æquatur, B D; B S, est commu-

2 *Sexti Elem.*

3 *Tertij Elem.*

Axiomatis primi pars posterior.

8 *Primi Elem.* 32 *Primi Elem.* 29 *Primi Elem.*

nis, &, A S, S D, sunt æquales) &, A B D, æquatur duobus, B C D, B D C; ergo, A S, est Tangens dimidij summæ angulorum, D, C; & est, K B S, differentiâ inter angulum, A B K, seu, C, interiorem, & dimidium dictæ summæ nempè, A B S; seu inter angulum, K B D, vel illi coalternum, & æqualem, B D C, ac, D B S, cuius Tangens ostensa est, K S. Ergo vt summa crurum, D B, B C, ad eorum differentiam, F C; ita Tangens, A S, dimidij summæ angulorum, A B K, K B D, vel, C, D, ad Tangentem, K S, differentiæ ipsorum angulorum, D, C, infra, vel supra eandem semisummam.

Corollarium.

Hinc innotescit quod, si illa differentia, hoc est angulus, K B S, addatur ipsi semisummæ, vt ipsi, S B D, fiet angulus, K B D, seu, B D C, maior: & si dematur ab eadem, vt ab angulo, A B S, fiet angulus, A B K, seu B C D, minor.

PROBLEMA VNDECIMVM.

In triangulis planis vniuersis, datis duobus cruribus, & angulo verticali, angulos ad basim patefacere, & subinde etiam ipsam basim.

Iuxta Axioma tert. eiusque Corollarium.

FAC vt summa crurum ad eorum differentiam: ita Tangentem semisummę angulorum ad basim ad Tangentem differentiæ, quæ adde semisummæ fiet angulus maior, deme fiet angulus minor.

Afferam verò exemplum illis duobus conforme, quæ pro calculo Martis habentur in supplemento Ephemeridum Magini Canone 10, vt intelligat studiosus Trigonometriam planam Astronomiæ pariter mirificè deseruire. Sit ergo in fig. 14 circulus, A F P G, qui concipiatur esse in plano Ecliptica, in cuius centro, S, sit Sol, terra verò in, T, per quæ transeat diameter, A S T P, &, M, sit locus Martis eccentricus in Ecliptica, punctum in quam, super quod Mars perpendiculariter imminet. Supponatur verò, M S, distantiam Martis à Sole esse 165304, *&, S T, distantiam Solis à Terra earundem partium* 98210: *& angulum, A S M, anomaliæ orbis gr.* 148. 44'. 30'', *qui est æqualis summæ angulorum, S M T, S T M, eiusq; dimidium gr.* 74. 22'. 15''. *Quæratur autem angulus, M, qui dicitur æquatio orbis: Triangulum ergo, M S T, erit eiusmodi quale, D B C, in fig. 13, cuius crura data sunt, M S, S T, & dimidium anomaliæ, A S M, seruiet pro dimidio summæ angulorum ad basim, S M T, S T M. Sic ergo iuxta Axioma præcedens instituta Regula trium, prodit differentia gr.* 42. 18'. 22'', *quæ (cum, M, lateri, S T, minori quam, S M, oppositus, sit minor angulo, S T M) demenda est ex dimidio anomaliæ gr.* 74. 22'. 15, *& remanebit angulus, M, æquationis orbis quæsitæ gr.* 32. 3'. 53''.

32 *Primi Elem.*

19 *Primi Elem.*

In fig. 14.	*Per lineas*		*Per Logarith.*	
M S, Distantia Martis a Sole	165304			
S T, Distantia Solis à Terra	98210			
Vt summa ipsorum, M S, S T, datorum	263514	*r l*	1457920	*A*
Ad differentiam eorundem	67094	*l*	482668	*B*
Ita dimidij, A S M, nempè semianomaliæ orbis, gr. 74.22'.15', *data Tangens*	357457	*m*	1055322	*C*
Ad differentiæ subtrahendæ, gr. 42.18'.22'' *Tangentem*	91013	*m*	995910	*D*
M, æquatio orbis quæsita gr. 32.3'.53''.				

In Chiliade quæsitus est Log. numeri 263, *& eius pars proportionalis pro relictis notis* §14, *& factus Log. cum Carac.* 5, *dempsus fuit à* 2000000, *vt haberetur Ref. Logar. eiusdem* 1457920 *primo loco ponendum, & hoc iuxta Prob.* 3: *sic reliqui inuenti per partem proportionalem correcti sunt.*

Nota quod operando per Logar. ipsius summæ Ref. Log. A, & differentiæ Log. B, perseuerant ijdem pro cæteris locis Martis in circulo, A F P G, vt pro, F, G, vnde sufficit illis addere, C, Mes. semianomaliæ, vt semianguli, A S F, vel, A S G &c. (quæ in præcedentia signorum computatur) & prouenient Mes. D, differentiæ, quæ dempta ex semiano malia relinquet, F, G, æquationes orbis. Porrò adduntur ipsę æquationes ve-

rò loco Martis eccentrico in Ecliptica in priore semicirculo anomaliæ orbis, AF M P, & subtrahuntur ab eodē in posteriori, AG P, vt prodeat verus locus Martis in Zodiaco Primi Mobilis.

Habitis angulis, poterit quoq; basis, TM, obtineri, si fiat per Prob. 10, vt Sinus anguli, M, ad, S T (vel vt Sinus anguli, M T S, ad, M S) ita Sinus anguli, M S T, ad, M T; quæ erit distantia Martis à Terra.

Axioma quartum Planorum lineare.

IN triangulis planis vniuersis vt Radius ad Sinum 2 anguli verticalis, ita duplum facti à cruribus ad differentiam inter quadrata crurum, & basis quadratum.

Demonstratio.

SIt in fig. 15 quodcunq; planum triangulum vel, A C B, cum angulo verticali, C, acuto: vel, A F B, cum verticali angulo, A F B, obtuso, & ab, A, cadat, A G, perpendiculariter super, C B, vt in, G. Est ergo, A C, ad, C G (sumpta, C B, communi altitudine) vt rectangulum, A C B, ad rectangulum, B C G; vel vt duplum rectanguli sub cruribus, A C, C B, ad duplum rectangulum sub, B C, C G, sed hoc est æquale excessui quadratorum crurum, A C, C B, super quadratum basis, A B: ergo vt, A C, ad, C G, hoc est (posita in triangulo rectangulo, A G C, pro Radio hypotenusa, A C) vt, A C, tanquam Radius ad, C G, Sinum anguli, C A G, nempè Sinum 2 anguli verticalis, C, ita duplum facti à cruribus, A C, C B, ad excessum quadratorum, A C, C B, super quadratum basis, A B. Eadem ratione ostendemus pro triangulo, A F B, vt, A F, ad, F G, nempè vt Radius, A F, ad, F G, Sinum anguli, F A G, hoc est Sin. 2 anguli, A F G. vel, A F B, ita esse (sumpta communi altitudine, F B) rectangulum, A F B, ad, G F B, vel duplum, A F B, ad duplum, G F B: est autem duplum rectanguli, G F B, æquale defectui quadratorum, A F, F B, à quadrato basis, A B. Ergo vt Radius ad Sinum 2 anguli verticalis, ita duplum facti à cruribus est ad differentiam inter quadrata crurum, & basis quadratum.

Prima Sexti Elem.

13 Secundi Elem.

Per Axioma primum.

Prima Sexti Elem.

12 Secundi Elem.

PROBLEMA DVODECIMVM.

In triangulis planis vniuersis, datis cruribus, & angulo verticali, basim, absq; angulorum eide adiacentium notitia, inuenire.

FAC vt Radius ad Si. 2 anguli verticalis, ita duplum facti à cruribus ad differentiam inter quadrata crurum, & quadratum basis: quam deme ex quadratis crurum, si angulus verticalis est acutus, adde ijsdem, si est obtusus; & relicti, vel conflati radix quadrata erit basis quæsita.

In eadem fig. 15 referat nobis, C, aliquem portum, à quo discedant duæ naues in diuersas Mundi plagas eiusq; angulo, C, graduum 50 inter se distantes: esto autem quod vna perueniens ad, A, fecerit milliaria 35, & alia à, C, vsq; ad, B, milliaria 58; & quod velimus scire (abutentes earum itineribus perinde ac si fierent in rectis lineis) quot milliarijs in situ, A, B, inter se distent nempè quanta sit basis, A B. Ducemus ergo, C A, 35 in, C B, 58, productumq; 2030 duplabimus, vt sit 4060: Ac ductis in se 35, & in se 58, faciemus quadrata 1225, & 3364, quorum summa erit 4589. Deinde sic Regulam Trium instituemus.

Iuxta Axioma quartū.

Iuxta 12, & 13 Secundi Elem.

In fig. 15.	*Per lineas*		*Per Logarith.*
Vt Radius, AC,	100000	*r l*	0
Ad dati anguli, C, gr. 50. 0′ *Si.* 2.	64279	*l*	980807
Ita data duo facta à cruribus, AC, CB, nempè	4060	*l*	360853
Ad differentiam quadratorum, AC, CB, & quadrati, AB.	2610	*l*	341660
Hanc, quia, C, est acutus deme è quadratorum summa	4589		
Et fiet quadratum	1979		
Cuius radix quadrata erit, AB, quæsita, nempè milliaria.	44.4		

Axioma quintum Planorum lineare.

IN triangulis planis vniuersis vt latus maximum ad summam reliquorum laterum, ita differentia eorundem reliquorum laterum, ad segmentum lateris maximi: quo dempto, in relicti dimidium perpendiculum cadit.

Demonstratio.

IN eiusdem fig. 15 triangulo, A C B, supponatur nunc, C B, latus maximum, &, A, centrum circuli, D C F E, ad interuallum, A C, non minori ipso, A B, descripti, cuius periphæria notet in, C B, punctum, F, & in, A B, punctum, E; productaque, B A, vsq; ad circumferentiam vt in, D, perpendiculum, A G, super, C B, demittatur, quod bifariam secabit, C F, in, G. Erit ergo rectangulum sub prima, C B, & quarta, B F, æquale rectangulo sub secunda, D B, & tertia, B E: ergo prima, C B, seu latus maximum, ad secundam, D B, seu, C A, A B, summam reliquorum laterum, erit vt tertia, E B, differentia eorundem laterum, ad, F B, segmentum, quo dempto ex, B C, in relicti, C F, dimidium, G, perpendiculum, A G, cadit.

3 Tertij Elem. Cor. primum 36 Tertij Elem. Comandini. 16 Sexti Elem.

PROBLEMA DECIMVMTERTIVM.

In triangulis planis vniuersis, datis tribus lateribus, angulos patefacere.

FAC vt latus maximum ad summam reliquorum, ita differentiam reliquorum ad segmentum lateris maximi, quo dempto in relicti dimidium perpendiculum cadit. Deinde cum habeas triãgulum ad rectangula reductum, in illis queres quemuis angulum per Prob. 8, & sic angulos quæsitos obtinebis.

Iuxta Axioma quintum.

Vt si in eadem fig. 15 *intelligantur tres locorum distantiæ, AC, milliaria* 13, *AB,* 20, *&, BC,* 21, *& quærantur eorum anguli positionum sic instituetur Regula Trium.*

In fig. 15.	Per lineas		Per Logarith.
Vt datum, B C, latus maximum milliaria	21	r l	1867778
Ad summam, B A, A C, datorum	33	l	151851
Ita, E B, differentia, B A, A C, datorum	7	l	084510
Ad segmentum, B F, quæsitum	11	l	104139
Vnde, F C, erit	10		
Et eius dimidium, F G,	5		
Adde, B F, F G, fit, B G,	16		

Deinde in triangulo rectangulo, A B G, per Prob. 8.

Vt, B G, datum	16	r l	1879588
Vt in fig. 8, vel 9. Ad, B G, Radium	100000	l	1000000
Ita, B A, datum	20	l	130103
Ad, B A, tanquam anguli, A B G, quæsiti gr. 36. 52' Secantem	125000	t	1009691

Sic in triangulo rectangulo, A G C, cum, G C, 5, &, C A, 13, inuenietur, A C G, gr. 67.23', vnde, B A C, eorundem summæ gr. 104 15' suppl. erit gr. 75.45'.

PROBLEMA DECIMVM QVARTVM.

In triangulis planis vniuersis, datis tribus lateribus, angulos, absq; reductione ad rectangula, notificare.

FAC iuxta Axioma quintum (postpositis tamen prioribus duobus terminis) vt duplum facti à cruribus quæsitum angulum ambientibus ad differẽtiam inter quadrata eorundem crurum, & basis quadratum: ita Radium ad Sinum 2 anguli quæsiti.

Vt si in eodem triangulo fig. 15, ijsdem suppositis, sit inueniendus angulus, A: factis quadratis crurum, B A, 20, &, A C, 13, nempè 400, & 169, & eorum summa 569: rursusq; facto quadrato basis, B C, 21, nempè 441; ipsum, cum sit minus, quam quadratorum summa 569 (subinde, C A B, erit acutus) ab eadem subtrahemus, & remanebit differentia 128. Deinde ductis inuicem cruribus, B A, 20, &, A C, 13, productoq; 260 duplato, quod faciat, 520, sic Regulam Trium instituemus, iuxta quam emerget, C A B, quæsitus gr. 75. 45, vt quoq; in Prob. ant. inuentus est. 13 Secundi Elem.

In fig. 15.	Per lineas		Per Logarith.
Vt duplum facti à cruribus, B A, A C, datis	520	r l	1728400
Ad differentiam datorum quadratorum, B A, A C, & quadrati, C B,	128	l	210721
Ita Radius	100000	l	1000000
Ipsius 24615 tãquã Sinus, vel 939121 tãquam Log. anguli est gr. 14. 15, scil. vt Si. 2, vel Ad anguli, B A C, quæsiti gr. 75. 45 Si. 2	24615	l 2	939121

Log. 2 dant eorum comp. nempè gr. 75. 45', qui in Canonis altera facie sumuntur.

Et hæc sunt omnia data, & quæsita, quæ in calculo triangulorum planorum, communiter vsurpari solent. Alia verò extraordinaria pro rectangulis habes in meo Directorio Par. 2, Cap. 2, pag. 112: & pro obliquangulis ibidem pag. 161.

PROBLEMA DECIMVM QVINTVM.

Omnia de triangulis obliquangulis præcedentia Problemata per reductionem ad rectangula absoluere: hoc est per solum Axioma primum.

DEMITTENDVM est perpendiculum ab vno angulorum propositi trianguli in latus oppositum (illudq; productum, si opus est) ab eo nempe, quo in altero factorum triangulorum, vltra angulum rectum, duo quoque nota haberi possunt. Cadit autem intra triangulum, cum reliqui duo anguli sunt eiusdem speciei, & extra, si diuersæ.

Elicitur & 32 Primi Elem.

Sic igitur pro solutione Problematis 9, in fig.10,& 11, datis ex gr. C A, A H, & angulo, C, ac specie ipsius, H, quæsiti; demissoque perpendiculo ab, A, communi termino datorum laterum, H A, A C (quia sic in altero factorum triangulorum, A C K, A K H, vt in, A C K, vltra angulum rectum, A K C, habentur duo quoq; nota, nempè, A C, & angulus, C) si fiat vt, C A, Radius ad, C A, datum in alia mensura, ita, A K, Sinus anguli, C, ad aliud, illud erit, A K, datum in dicta mensura. Deinde vt, A K, datum ad, A K, Radium, sic erit, A H, datum, ad, A H, Secantem 2 anguli, H. Vel etiam vt, C A, Secans 2 anguli, C, ad, C A, datum, ita, A K, Radius ad, A K, datum: deinde vel sicut antea, vt, A K, datum ad, A K, Radium, sic, A H, datum ad, A H, Secantem 2 anguli, H. Vel vt, A H, datum ad, Radium, A H, ita, A K, datum ad, A K, Sinum anguli, H, his omnibus modis notificabilis.

Iuxta priorẽ partè Axiomatis primi. Iuxta posteriorem.

Iuxta priorẽ.

Pro 10 Prob. datis in ijsdem figuris duobus angulis, vt, C, H, cum, A H, latere vni oppositio, non dissimili ratione habebitur, A C, demisso ab, A, perpendiculo. Nam erit vt, A H, Radius ad, A H, datum, ita, A K, Sinus anguli, H, ad, A K, datum. Vel vt, A H, Secans 2 anguli, H (nempè cum est obtusus, vt in fig.11, Secans excessus, A H C, super quadrantem) ad, A H, datum, ita, A K, Radius ad, A K, datum. Deinde in triangulo, A K C, vt, A K, Radius ad, A K, datum, ita, A C, Secans 2 anguli, C, ad, A C, datum. Vel vt, A K, Sinus anguli, C, ad, A K, datum, ita, A C, Radius ad, A C, datum.

Iuxta priorẽ. Iuxta posteriorem. Iuxta priorẽ.

Pro 11 Prob. supponantur nunc in ijsdem fig.10,& 11 tanquam crura, A C, C H, quæ sint data, cum angulo, C, verticali, & quærantur anguli ad basim, A H. Hic perpendiculum demittendum est, non à, C, communi termino datorum vt prius, sed ab, A, vel ab, H, super oppositum latus, vt nunc ab, A, super, C H (productum in fig.11) sic enim habemus triangulum, A C K, in quo præter rectum, A K C, adsunt, A C, crus, & angulus, C, data. Facies ergo vt, A C, Radius ad, A C, datum, ita, A K, Sinum anguli, C, dati ad, A K, datum. Vel vt, A C, Secans 2 anguli, C, ad, A C, datum, ita, A K, Radium ad, A K, datum. Deinde vt, A C, Radius ad, A C, datum, ita, C K, Si. 2 anguli, C, ad, C K, datum. Vel etiam vt, A C, Secans anguli, C, ad, A C, datum, ita, C K, Radium ad, C K, datum. Cuius cum, C H, sumpta, per subtractionem minoris à maiore, differentia, K H; facies deniq; in triangulo, A K H, vt, H K, datum ad, H K, Radium, ita, K A, datum ad, K A, Tangentem anguli, A H K, acuti, cuius suppl. est, A H C, obtusus in fig.11. Deniq; & basim, A H, obtinebis, si facies vt, H k, datum ad, H k, Radium, ita, A H, Secantem anguli, A H k, ad, H A, datam basim.

Iuxta priorẽ. Iuxta posteriorem. Iuxta posteriorem. Iuxta posteriorem.

Pro 12 Prob. eadem inquires, quæ pro 11 quæsiuisti, deinde quadrata, A k, k H, datorum simul addes, & summæ radix quadrata erit, A H, basis quæsita.

Tandem Prob.13 per reductionem ad rectangula cadentem super latus maximum perpendiculo, expeditur. Omnes ergo casus & per reductionem ad triangula rectangula, & sine illa solui possunt.

Hinc si offeratur soluendum triangulum æquicrure, vt in fig.15, C A F, æqualia habens crura, C A, A F; demisso ab angulo verticali, A, perpendiculo, A G, illud in duo triangula rectangula erit dislocatum, vnde ex solutione trianguli, A G C, vel, A G F, habebitur quoq; solutio pro, A C F: quod etiam pro æquilatero intelligendum est. Diuersa autem in ipsis data, & quęsita ex dictis facilè discernes, vt & per proprias Regulas eadem quæsita tibi comparabis.

Nota autem, quod rectangulorum calculum per Logarithmos, hoc est totius planæ Trigonometriæ, hac vnica Regula generali, quam voco, Axioma primum Planorum Logarithmicum, quia ab eorum Axiomate primo lineari pendet, memoriæ consignare poteris.

Axioma primum Planorum Logarithmicum.

IN triangulis planis rectãgulis Logarithmus cruris, cum Logarithmo Radij; æquatur Logarithmo anguli dicto cruri oppositi, cum Logarithmo hypotenusæ.

Et idẽ Logarithmus cruris cum Logarithmo Radij; æquatur Mesologarith. anguli dicto cruri oppositi, cum Logarithmo reliqui cruris.

Demonstratio.

IN prima fig. supponamus ex. gr. pedem pro communi laterum trianguli, A B C, mensura. Erit ergo per priorem partem Axi. primi linearis, vt, B C, tot pedes, ad, B C, tanquam Sinum anguli, A, ita, B A, tot pedes ad, B A, tanquam Radium (in eius enim priori parte ponitur pro Radio hypotenusa) Vel vt, A C, tot pedes, ad, A C, tanquam Sinum anguli, B; ita, B A, tot pedes, ad, B A, tanquam Radium. Per posteriorem verò Axiomatis partem erit vt, B C, tot pedes, ad, B C, tanquam Tangentem anguli, A, ita, C A, tot pedes ad, C A, tanquam Radium (etenim in posteriori parte ponitur pro Radio alterum crurum) Vel vt, A C, tot pedes, ad, A C, tanquam Tangentem anguli, B; ita, B C, tot pedes, ad, B C, tanquam Radium. Cum ergo quatuor proportionalium numerorum Logarithmi extremorum æquentur Logarithmis mediorum; in prima analogia suprædictarum erit Log. cruris, B C, tot pedum, cum Logar. Radij; æquale Logarithmo anguli, A, oppositi, cum Logarithmo hypotenusæ, B A. Vel in secunda Log. cruris, A C, tot pedum, cum Logarithmo Radij; æquabitur Logarithmo anguli, B, cum Log. hypotenusæ, B A, tot pedum, per quæ patet prior pars Axiomatis. Similiter in tertia analogia Logar. cruris, B C, tot pedum, cum Logarithmo Radij; æquabitur Mesologarithmo anguli, A, cum Logarithmo reliqui cruris, C A, tot pedum. In quarta tandem Logar. cruris, A C, tot pedum, cum Logarithmo Radij; æquabitur Mesologarithmo anguli, B, cum Logarithmo reliqui cruris, B C, tot pedum, vnde posterioris partis Axiomatis veritas apparet.

Num. 25 prælud.

Corollarium primum.

IDcircò si dictorum quatuor proportionalium tria data erunt (hoc est duo vltra Radium) quartum innotescet, vel per subtractionem Logarithmi primi dati à Logarithmis secundi, & tertij dati, qui est secundus modus Prob. 5. Vel iuxta tertium modum per additionem residui Logarithmi primi dati cum Logarithmis secundi, & tertij dati, demendo à facta summa semper vltimo loco ad sinistrum Binarium, vel Vnitatem cum est in primo loco Radius, sic igitur ex. gr. si quatuor proportionalia proposita fuerint crus, B C, tot pedes, idem, B C, tanquam Sinus anguli, A; B A, tot pedes, &, B A, vt Radius, vt in prima analogia, horum verò dentur quælibet tria, vt ex. gr. Radius (qui semper est datus) crus, B C, & Sinus anguli, A, ignotum, B A, notificabitur, si addantur simul iuxta priorem partem Axiomatis Log. Radij, cum Logarithmo cruris, B C, qui sunt noti, & à summa auferatur Log. anguli, A (vel eisdem addatur Res. Log. A, hoc est, per Tabellam Prob. 5, Tom. 2 eiusdem anguli, A, & à summa auferatur Binarium) remanebit enim Log. B A, quæsitum. Et sic in cæteris casibus procedes.

Deniq; prætereundum non est omnes rectangulorum dictos casus per solum Axioma secundum, & tertium lineare, vel Logarithmicum subsequens solui posse.

Axioma secundum Planorum Logarithmicum.

IN triangulis planis vniuersis Logarithmus cuiusuis lateris, cum Logarithmo cuiusuis angulorum eidem adiacentium, æquatur Logarithmo lateris, cum Logarithmo anguli, prædictis oppositorum.

Demonstratio.

VT in primæ fig. triangulo, A C B, Log. cruris, B C, cum Log. anguli recti, C, nempè Radij; æquatur Log. anguli, A, cum Logarithmo hypotenusæ, A B, conformiter priori parti Axiomatis primi lineari. Æquantur in quam vel per superius proximè dicta, vel quia per Axioma secundum lineare, vt, C B, ad Sinum anguli, A, ita, A B, ad Sinum anguli, C, recti, etenim huius Axiomatis demonstratio, etiam rectangulis accommodari potest, vt consideranti patefiet. Sic Log. A C, &, C, æquatur Log. B, &, B A. Sicut in triangulo obliquangulo, D F E, secundæ figuræ Log. D F, & anguli, F, æquantur Log. D E, & anguli, E. Vel Log. F D, &, D, æquantur Logar. F E, &, E. Vnde quatuor proportionalium datis tribus, quartum innotescet, & subinde omnes rectangulorum casus per hoc solum Axioma secundum siue lineare, siue Logarithmicum soluentur, vt hoc examinanti patefiet.

Supereſt solus casus, quando in rectangulo datis cruribus, vt, AC, C B, in prima fig. quærimus angulos, A, B, qui, cum detur quoq; angulus rectus, C, ab illis comprehensus, poterit solui per Axioma tertium lineare, seu per subsequens Logarithmicum eidem correspondens.

Axioma tertium Planorum Logarithmicum.

LOgarithmus summæ crurum, cum Logarithmo differentiæ infra, vel supra dimidium summæ angulorum ad basim; æquatur Logarithmo differẽtiæ crurum, cum Mesologarithmo semisummæ angulorum ab basim.

Hoc patet quia hæc sunt proportionalia per Axioma tertium lineare. *Num. 25 præluđ.*

Corollarium secundum.

EX dictis colligitur in Trigonometria plana, siue per lineas, siue per Logarithmos operando, dupliciter omnes eiusdem prædictos casus solui posse. Nempè vel per solum Axioma primum lineare, aut Logarithmicum, omnia obliquangula ad rectangula reducendo. Vel per solum Axioma 2. 3, & 5 nihil inter rectangula, & obliquangula distinguendo. Vtram velis harum viarum deligere tuum erit studiose Lector, qui, in memoriæ subsidium, paucis his Axiomatibus firmiter semel apprehensis, facilè quoscunque tibi occurrentes casus absoluere poteris.

PROBLEMA DECIMVMSEXTVM.

Omnia pro triangulis planis rectangulis, & obliquangulis præcedentia Problemata tantum per regulam, & circinum absoluere.

Huius Regulæ, vel Scalæ partes possunt supponi esse pedes, vel passus, aut vlnæ, seu decempedæ, aut milliaria parua &c. magnis respondentia.

HABEATVR regula, seu scala, vt, B O, fig. 16, in quotcunq; partes æquales, vt in 100 diuisa, quibus sint appositi numeri ad singulas quinque, vel decem &c. Similiter paretur quadrans, vt, E A F, fig.17, in gr. 90 distributus: quod fiet si circino ad distantiam Radij, A F, aperto, à punctis, E, F, circumferentiam, E F, quadrantis in tres partes æquales diuiseris; & earum singulas in alias tres deinde harum quælibet in duas, & hæ denique singulæ in quinque secentur: tota enim in partes æquales, seu gr.90 erit distributa. Quibus, vt in scala, sui quoq; numeri ad singulas quinque, vel 10 &c. apponentur, vt patet in eadem fig.17.

His paratis, totum ferè negotium ex hoc solo Problemate pendet. Super datam rectam lineam, & ad datum in ea punctum, dato cuicunque angulo rectilineo æqualem angulum constituere: estque prop 23 Primi Elem. quod tali ratione exequemur. Vt si sit data recta, D F, in eaque punctum, E, in fig.18, ad quod velimus in ea ad partes, F, angulum graduum 30 constituere: circino aperto ad interuallum, Radij quadrantis, A F, centro, E, indefinitum arcum, I M, incipiendo à linea, D F, describemus, per ipsumque captis ex quadrante, E A F, gr.30, nempè arcu, F C, eadem apertura notabimus arcum, I G, & per, G, ab, E, extendentes, E G H, rectam, constituemus angulum, H E F, graduum 30. Si autem occurreret constituendus obtusus, ad alteras lineę partes constitueremus eius suppl. qui est acutus, vt pro, H E D, gr.150 fieret, H E F, gr. 30, & hoc quia quadrans non præbet nisi angulos acutos.

23 Primi Elem.

Considerandū nūc est in solutione planorū, siue sint triangula rectangula, siue obliquangula (inter quæ hic non distinguimus) quinque tantum data, vt patet ex antecedentibus ad summum haberi posse, nempè. Primò, tres angulos singillatim. Secundò, duos angulos cum latere vni opposito. Tertiò, duo latera cum angulo vni opposito, ac specie reliquo oppositi. Quartò, duo latera cum angulo comprehenso. Quintò, tandem, & vltimò tria latera. Reliqua ergo in ijsdem triangulis ex his datis sic inquiremus.

1. Vt in Problem.6.
2. Vt in 7. & 10.
3. Vt in 8. & 9.
4. Vt in 11.
5. Vt in 13.

Primò, datis tribus angulis singillatim alicuius trianguli, possumus illi simile triangulum, etiam si sit satis magnum, in aliquo plano describere super datam quamcunque rectam, vt in fig.19 super, C D, si in eadem constituantur per præmissum hic Problema duo anguli ad eius extrema, C, D, duobus suppositi triāguli angulis singillatim æquales, vt, F C D, F D C, tertius enim, C F D, tertio æqualis erit. Circino vero ipsis lateribus, C D, C F, F D, scalæ, B O, fig.16 applicatis, innotescet laterum suppositi trianguli proportio, quam per Canonem quoque didicimus inuestigare pro rectangulis in Prob.6.

Def. prima Sexti Elem.

18 Sexti Elem.
32 Primi Elem.

Hinc describendi propositam Regionē modus elici potest.

Secundò, dentur in aliquo triangulo duo anguli, ex.gr. per quadrantem in agro obseruati vnus gr.30, & alter gr.110, cum latere opposito ei, qui est gr.110, pedum 70. In eadem ergo fig.19 extensa in plano indefinita recta linea, A B, in ea circino signabimus, C D, 70 partium scalæ, B O (quæ nobis erunt tanquam pedes parui) & ad punctum, C, faciemus angulum graduum 30: sicuti ad, D, angulum gr.40 duorum datorum suppl. & ad concursum, F, procreabitur angulus, F, graduum 110. His descriptis si scalæ, B O, circino applicentur latera, C F, F D, illicò innotescet, C F, esse ferè p.48, &, F D, p.37.

Tertiò, sint data duo latera in aliquo obseruato triangulo, vnum p.50, & aliud p.20, cum angulo gr.20 opposito lateri gr.20, & cum specie reliquo datorum oppositi, qui supponatur acutus: cętera autem inquirantur. Sit ergo in fig.20 recta indefinita in plano extensa, A B, & in ea circino signata, C D, p.50, & angulus, C, per arcum, E F, gr.20, extensa indefinitè, C G; captis verò ex scala, B O, pedibus paruis 20, eadem apertura posito vno circini pede in, D, & alio pede circumducto circuli peripheriam describemus, vt, T H. Hæc verò bis poterit secare ipsam, C, G, vt in, T, H, vnde & duplex triangulum fieri continget, nempè, C D H, C D T, eorundem laterum p.50, ac p.20 communem angulum, C, habentia, quorum, C D H, præbet angulum, C H D, acutum, & C D T, ipsum, C T D, obtusum (vt propterea ad hanc tollendam ambiguitatem necesse sit speciem anguli reliquo datorum oppositi notam habere, vt & in Prob.9 dicebatur) Cum ergo nos illum supponamus acutum, triangulum nostræ positioni congruens erit, C H D, in quo, C H, per scalam, B O, inueniemus esse p. 57. Angulos verò, H, D, in quadrante,

Quādo arcus anguli mensurandi excedit quadrantem, vt in

fig.20 arcus, P O, applica quadrati gr. 90, vt, P I, & deinde exceſſum ſupra quadrantem, nempé, 10.

E A F, fig.17 notificabimus, vel vtroſque, vel eorum alterum, vt, D, deſcripto arcu, P O, ad Radium, A F, quadrantis, E A F, eoq; arcui, E F, ipſius quadrantis per circinum applicato: quem inueniemus eſſe gr. 102, vnde, H, ſupple. duorum, C, D, erit gr. 58.

Quartò, dentur in obſeruato triangulo duo latera p. 39, & p. 50, cum angulo comprehenſo gr. 40, & reliqua quærantur. Sit ergo in fig.21 extenſa, A B, indefinita, & in ea ex ſcala circino ſignati, C D, p.50, & angulus, C, gr.40, ac in latere, C G, indefinitè extenſo, ipſa, C H, p.39. Iuncta enim baſi, H D, illa per ſcalam, B O, inuenietur p.32, & angulus, D (deſcripto centro, D, arcu, L M, ad radium quadrantis, E A F) gr.51, & ſubinde, H, duorum notorum, C, D, ſupplementum erit gr.89.

Quintò, denique, & vltimò dentur in obſeruato triangulo tria latera, vnum p.50, aliud p.39, & reliquum p.32, & inquirantur anguli. Accipiemus ergo ex ſcala, B O, prædictorum pedum numeros, & ex illis triangulum, H C D, conſtituemus, vtentes eadem fig.21, expanſoque circino ad interuallum Radij quadrantis, ſuper punctis, C, D, arcus, E F, M L, deſcribemus, quibus quadranti, E A F, applicatis, innoteſcet angulum, C, eſſe gr.40, &, D, gr.51, vnde eorum ſupplementum, H, erit gr.89.

22 Primi Elem.

His ergo omnem caſum tam in rectangulis, quam in obliquangulis, licet non tam accuratè, ac per numeros, expedies: aduertendo quod, ſi regulæ, B O, partes triangulum, tuum planum excedens, procrearent, vt cum partes, B O, tibi ſingulæ pro pedibus habentur, tunc vel dimidium, vel quarta, aut alia pars &c. datorum pedum tibi ſumenda erit. Vt pro p. 80 capiens partes 40, vel 20 &c. quarum ſingulæ tunc erunt duorum, ſiue quatuor pedum &c.

Hæc verò circa Trigonometriam planam dicta ſufficiant: in qua vt vides tam per lineas, quam per Logarithmos, & ſine his, per regulam, & circinum operari licebit. Verum tamen eſt Logarithmorum vim, & energiam minus hic, quam in Trigonometria ſphærica laborem ſubleuare, tum propter moleſtiam, quam continuò affert caracteriſtica Logarithmorum, cui hic ſolerter eſt attendendum, aut reſiduum Logar. in Chiliade quærendum, tum etiam propter difficultatem venandi partem proportionalem in magnis numeris, in hac ſola Chiliade aliquantulum etiam nonnumquam à vero aberrantem (facilior enim, ac correctior euaderet calculus per 10 Chiliades in meo Directorio poſitas, & multò magis per centum Chiliades Briggianas ab Vlacq in Editione Goudana completas) & tandem cum in paruis numeris expeditius videatur ſine Logarithmis operari. Propterea, his conſideratis, Logarithmorum vſum in Trigonometria plana poterit quiſq; pro ſui libito, & prout experietur, vel retinere, vel dimittere. At in Trigonometria ſphærica nuſquam mehercle videntur negligendi Logarithmi, in ea enim non eſt caracteriſticæ Logarithmorum attendendum, nec reſiduum Log. in Chiliade quærendum eſt, nec adeò difficilis euadit pars proportionalis, cum magnis numeris arcus ſubſtituantur; ſed omnia planiora fiunt, ac mira facilitate eiuſdem operationes abſoluuntur, vt vnuſquiſque in ſequentibus poterit experiri. Vide autem ſi libet in fine Epilogum Regularum tam pro triangulis planis rectangulis, quam pro obliquangulis.

Calculus per Logarithmos facilior euadit in Trigonometria ſphærica, quã in plana, & cur?

Epilogus Regularum Trigonometriæ planæ.

Finis Trigonometriæ Planæ.

TRIGONOMETRIÆ
Linearis, ac Logarithmicæ
PARS POSTERIOR
De Trigonometria Sphærica.

Definitiones, ac Principia.

Sphæra.

I. SPHÆRA est solidum sub vna superficie contentum, ad quam ab interiori quodam puncto omnes, quæ ducuntur rectæ lineæ inter se sũt æquales. Prædictum verò punctum illius cẽtrum appellatur: & diameter, quæ per centrum transiens, hinc inde ad Sphæræ superficiem terminatur.

Theodosius lib. 1.

Centrum, diameter.

Circuli maximi, seu maiores, & minores.

II. CIRCVLI maximi, seu maiores in Sphæra dicuntur, qui transeunt per eiusdem centrum. *Hi verò sese bifariam dirimunt, cum se secent in diametro Sphæræ.* Circuli autem minores vocantur non transeuntes per eiusdem centrum.

Poli.

Axis.

III. ET si punctum in superficie Sphæræ vndiq; à periphæria cuiuscunque in ea circuli distauerit, illius polus dici solet. *Et subinde quilibet in ea circulus potest habere duos polos, quos recta iungens vocatur Axis.*

Triangulum Sphæricum.

IV. TRIANGVLVM sphæricũ est, quod in Sphæræ superficie à tribus maximorum circulorum arcubus, singillatim semicirculo minoribus comprehenditur. *Vt si in fig. 22 sit Sphæra, in eaq; circulus maximus, A I C M; ducanturq; alij circuli maximi quotcunque, & qualescunque, quorum medietates sint, A V C, I V M, sese in, V, & cum, A I C M, in punctis, A, I, C, M, vtcunq; secantes: orientur in superficie Sphæræ triangula Sphærica, A I V, I C V, V C M, V A M, cuiusmodi etiam supponuntur in 3, & 4 figura triangula, G I H, K L M, è Sphæra desumpta: quæ omnia habent latera semicirculo minora.*

Aduerte periphærias circulorum in Sphæra minorum non concurrere ad triãgulorum sphæricorum constitutionem.

Angulus sphæricus.

V. ANGVLVS sphæricus est duorum arcuum circulorum maximorum in superficie Sphæræ mutuò se tangentium, & non in eodem plano consistentium alterius ad alterum inclinatio. Hanc verò metitur arcus circuli maximi super puncto angulari tanquam polo, ad quadrantis interuallum descripti. *Vt in eadem fig. 22 anguli ex. gr. C V M, non est C M, mensura, licet eum subtendat (nisi, V C, V M, sint quadrantes) sed debent assumi quadrantes, vt, V E, V F, & arcus, E F, circuli maximi polo, V, interuallo, V F, vel, V E, descripti, erit mensura, seu quantitas anguli, C V M. Hinc ille notus erit, cum, F E, notus erit: eiusq; Si. Ta. &c. Log. Meso-log. &c. erit, qui & ipsius, F E. In Sphæricis quoque erunt anguli recti, obtusi, & acuti, & eorum complementa, & supplementa, velut in planis dictum est.*

Eius mensura, seu quantitas.

Hinc innotescit angulos sphæricos quoq; gradibus periphæriæ circulorũ maximorum mensurari.

Angulus sphæricus notus.

Eius Si. Ta. &c.

VI. ARCVS enim circuli maximi in Sphæra dicitur arcui circuli maximi perpendicularis, cum facit angulos, qui deinceps sunt, inter se æquales, quorum subinde quilibet dicitur rectus, & eo maior obtusus, ac minor acutus. Quomodocunq; verò cadat vel rectos, vel duobus rectis angulos æquales semper efficiet, quod, vt in planis, probatur. Et si in triangulo, ad basim duos obliquos habente, ducatur ad ipsam basim à puncto verticalis anguli perpendicularis arcus, ille cadit intra triangulum, si anguli basi adiacentes sunt ambo vel acuti, vel obtusi; & extra, si vnus est acutus, & alter obtusus. Hoc verò probat Regiomontanus lib. 4. p. 8.

Arcus perpẽdicularis arcui.

Angulus sphæricus rectus, quo maior, obtusus, & minor, acutus, vt in planis, pariter appellatur.

Regula notanda.

VII. TRIANGVLVM sphæricum est aut rectangulum, nempè quod saltem habet vnum angulum rectum: aut obliquangulum, quod nullum habet angulum rectum. Dantur autem in sphæricis quoq; triangula æquilatera, æquicraria, ac scalena: & in rectangulis crura, & hypotenusa, sicut in obliquangulis crura, basis, & angulus verticalis, vt in planis dictum est, subintelliguntur. In omnibus verò triangulis sphæricis tres eorum anguli simul sumpti superant duos rectos. Et excessus eorum est ad eosdem duos rectos, vt quadruplum superficiei trianguli sphærici ad superficiem sphæræ, in quo gignitur ipsum triangulum. Hoc verò elicitur ex quinto Axiomate Sphæricorum, quod ego probaui in meo Directorio P. 3. Cap. 8.

Triangulum sphæricum rectangulum, & obliquangulum: æquilaterũ, æquicrure, & scalenum. Crura, hypotenusa, basis, & angulus verticalis, vt in planis.

Proprietas triãgulorum sphæricorum insignis.

VIII. CVM in triangulis sphæricis tam

Tres Regulæ prodistinguẽda specie angulorum, & laterum in sphæricis rectangulis.

anguli, quam latera gradibus mensurentur: eorum speciem notam reddere est detegere an sint maiora, vel minora, vel æqualia quadranti. Ad hoc autem seruient tres istæ Regulæ pro Triãgulis sphæricis rectangulis.

Prima Regula.

Prima est, quod crura sequuntur speciem oppositorum ipsis angulorum, & è contra. *Vt si in fig. 22, ducto semicirculi arcu, B S N D, ipsi, A S C, perpendiculari, fiat triangulum rectangulum, V S N, erit crus, S V, quadrante minus, si angulus illi oppositus, S N V, sit quadrante minor, & maior, si maior. Sic, &, S N, cum angulo, S V N, specie concordabit.*

Secunda Regula.

Secunda est, quod crura inter se, & illi oppositi anguli inter se specie concordant, si hypotenusa sit quadrante minor, ac non concordant, si sit quadrante maior, & è contra. *Vt si, V N, est quadrante minor, crura, V S, S N, inter se, & anguli, S V N, S N V, inter se specie concordant: non concordarent autem, si, V N, esset quadrante maior, & è contra.*

Tertia Regula.

Tertia tandem est, quod si hypotenusa est quadrans, etiam alterum crurum est quadrans, vel alter angulorum cruribus oppositorum est rectus: & è conuerso. *Vt si, V N, esset quadrans, alterum crurum, V S, S N, esset quadrans; & alter angulorum, S V N, S N V, rectus, & e conuerso. Has regulas ostendit Regiom. lib. 4, p. 3, 4, 5, 6, & 7.*

Triangulum residuũ &c.

IX. SI duo quæcunq; latera, vt in eiusdem fig. 22 triangulo, A S D, crura, A S, A D, versus basim vsq; ad concursum, C, continuentur, fiet triangulum, S C D, quod in Directorio vocaui triangulum residuum ipsius, S A D, ad angulum, S A D. Cum enim aliquando, S A D, triangulum contigerit esse ineptum solutioni, eius loco poterit substitui, S C D, quod tunc dicitur Vicarium ipsius, S A D. Est enim vtriq; triangulis, S A D, S C D, communis basis, S D; anguli vero, S A D, S C D, sunt æquales, quia habent communem mensurã arcum polis, A, C, ad interuallum quadrantis descriptũ: A S, est suppl. S C, &, A D, ipsius, D C, sunt enim, A S C, A D C, semicirculi: & angulus, A S D, est suppl. D S C, sicut, A D S, suppl. S D C, quia, S A D, S D C, vt &, A S D, D S C, sunt æquales duobus rectis. Quapropter nullum erit quæsitum in triangulo, A S D, quod per solutionem eius Vicarij, S C D, haberi non possit. Porrò triplex Vicarium trianguli, A S D, assignabile est, vnum nempè, S C D; aliud, A B S, ortum ex continuatione basis, D S, & cruris, D A, versus reliquum crus, A S: tertium tandem esset, quod oriretur ex continuatione basis, S D, & cruris, S A, versus reliquum crus, A D, in reliquo hæmisphærio vsq; ad concursum. Primum ergo adiacet basi, S D, secundum & tertium adiacent cruribus, A S, A D; & hæc duo postrema habent in suis partibus eandem conuenientiam cum triangulo, A S D, quam cũ eodem habere ostensum est, S C D. Eadem intellige pro quocunque alio, vt, V A M, cuius Vicaria erunt, V C M, I V A, & reliquum adiacens lateri, A M, in eadem Sphæræ superficie.

Triangulum Vicarium.

Per Num. 5 superiorem.

Per dicta Num. 2 superiori.

Per Num. 6 superiorem.

Quodlibet triangulum sphæricũ tria Vicaria habere potest.

X. CVM in exercendis Trigonometriæ Sphæricæ quibuscunq; Regulis incideris in arcum, vel angulum quadrante maiorem, cuius ex Regulæ præscripto sit capienda Tan. vel Sec. siue Mesol. aut Tom. quæ ex Num. 16 prælud. Partis ant. non dantur arcuum, vel angulorum supra quadrantem (nisi esset sumenda Ta. 2, vel Sec. 2 &c. quia tunc sumendæ essent pro excessu supra gr. 90, qui est semper quadrante minor, vnde hoc fieri posset) tunc certior eris triangulo tibi soluendo Vicarium substituendum esse. Verum de hoc & eædem Regulæ te admonebunt, quæ triangulum conditionatum postulabunt. Quod nam verò ex tribus Vicarijs, iam dictis oblati trianguli sit substituendum ex sequentibus intelliges.

Quãdo triãgulum Vicarium sit solutioni substituendum.

XI. IN quibuscunq; triangulis rectangulis semper substitues vel Vicarium adiacens hypotenusæ, vel adiacens cruri quadrante minori. Substitues quidem adiacens hypotenusæ, cum crura erunt singillatim quadrante maiora, vel cruribus oppositi anguli fuerint obtusi. *Vt pro, A S D, habente angulum, S A D, rectum, & crura, A S, A D, singillatim quadrante maiora, vel angulos, A S D, A D S, obtusos, substituere deberes Vicarium, S C D, in quo quinque illius partes præter rectum, S C D, essent quadrante minores, vt ex Nu. 9 superiori facile innotescit. At si triangulum soluendum esset, V A M, cum angulo recto, V A M, & crure, V A, quadrante minori, &, A M, maiori: seu cum angulo, A M V, acuto, &, A V M, obtuso, esset substituendum, I A V, habens idcirco quinq; partes præter rectum, quadrante minores.*

Duplex casus in rectangulis pro Vicario substituendo.

XII. IN quibuscunque obliquangulis triangulis pariter erit tibi substituendum pro Vicario trianguli soluendi, vel, quod adiacet basi, vel quod adiacet cruri quadrante minori, seu angulum acutum subtendenti vno excepto casu infra dicendo. Regulæ enim vel postulabunt in soluendo triangulo conditionem, quod habeat crura seu angulos oppositos singillatim quadrante minora, aut saltem minora semicirculo: Vel quod ad minus vnum crurum, vel vnus angulorum cruribus oppositorum sit quadrãte minus existente angulo verticali acuto, seu basi quadrante minori. *Si postuletur primum, & soluendum triangulum sit in eadem fig. 22 ex. gr. S A D (quod nunc supponatur obliquangulum, vt &, V A M) habens crura, S A, A D, vel angulos, A S D, A D S, singillatim quadrante maiores, Vicarium soluendum erit, S C D. At si sit, V A M, habens crus, A V, vel angulum, A M V, quadrante minorem, & crus, A M, vel angulum, A V M, quadrante maiorem, Vicarium erit, A I V, adiacens cruri quadrante minori. Vt etiam erit cum illa simul sumpta non erunt semicirculo minora, & talia ab ipsa Regula postulabuntur.*

Duplex conditio, & sex casus in obliquangulis pro Vicario substituendo.

Duo priores casus.

Si verò petatur secundum, quatuor casus occurrere poterunt. Primus erit cum ex. gr. propositum triangulum, vt, A S D, habuerit crura, S A, A D, vel angulos, A S D, A D S,

Quatuor posteriores casus.

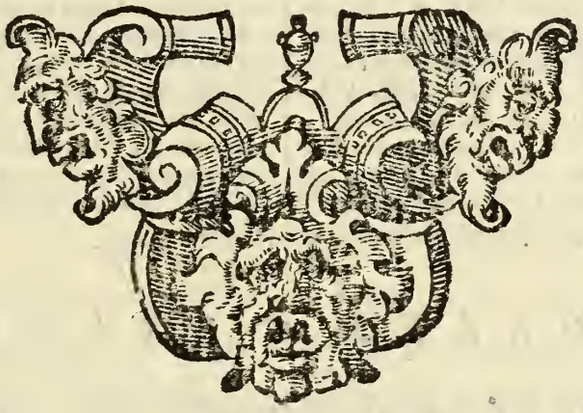
singillatim quadrante maiores, circa acutum, S A D, vel cum basi quadrante minori, & tunc Vicarium erit, S C D. Secundus erit si habeat eadem singillatim quadrante maiora, sed circa obtusum, qualis supponatur angulus, S A D, vel cum basi, S D, quadrante maiori: & tunc Vicarium erit alterutrum cruribus adiacẽtium triangulorum, vt, A S B. *Hic verò est casus, vt superius dixi excipiendus, Vicarium enim adiacet cruri quadrante maiori, seu obtusum subtendenti, quod solum hic contingit.* Tertius casus erit si proponatur triangulum, vt, S C D, cum cruribus, S C, C D, vel angulis, C S D, C D S, singillatim quadrante minoribus circa obtusum, qualis ponatur, S C D: eritq; pro Vicario substituendum, S C B. Quartus erit si propositum fuerit ex. gr. triangulum, V A M, habens crus, V A, vel angulũ, V M A, quadrante minus, & crus, A M, vel angulum, A V M, quadrante maius sed circa obtusum, V A M, seu cum basi quadrante maiori: & tunc erit Vicarium, I A V, adiacens cruri quadrante minori, seu acutum subtendenti.

Casus excipiendus.

Hinc intelligi potest in omnibus triangulis sphæricis omnem varietatem ad duo capita reduci: Vicarium enim erit semper, vel quod adiacet basi (nempé hypotenusæ in rectangulis) vel quod adiacet cruri quadrante minori, seu acutum subtendenti, excepto dicto casu. Vnde sciens ex continuatione arcus quadrante maioris prouenire arcum quadrante minorem, & ei oppositum angulum obtusum in acutum commutari, per temetipsum facile, etiam absq; respectu ad supra datas Regulas, Vicarium pro oblato quouis triangulo determinabis.

Nota.

Ad vberiorem verò dictorum intelligẽtiam vide quoque, si tibi libet, in Direc. P. 3, Cap. 1 insigniores circulorum in Sphæra superficie se secantium, ac Sphæricorum triangulorum proprietates.



TRIGONOMETRIÆ SPHÆRICÆ Linearis, & Logarithmicæ.

Axioma primum lineare, Triangulis Sphæricis Rectangulis inseruiens.

IN triangulis sphæricis rectangulis acutum ad hypotenusas eundem habentibus, Sinus crurum dicto acuto oppositorum Sinibus hypotenusarum: Et tangentes eorundem crurum Sinibus reliquorum crurum sũt proportionales.

Declaratio.

SInt in fig. 23 quotcunque triangula rectangula sphærica, C D A, B E A, communem habentia angulum acutum, A, rectis existentibus angulis, A D C, A E B. Dicitur ergo quod vt Sinus cruris, C D, ad Sinum cruris, B E (quæ duo opponuntur acuto, A) ita est Sinus, C A, ad Sinum, A B. Et quod vt Tangens, C D, ad Tangentem, B E, ita est Sinus, D A, ad Sinum, A E. *Hoc autem ostenditur in meo Direc. P. 3, Cap. 2, ex quo 16 Regulæ pro omni Rectangulorum quæsito tam per lineas, quam per Logarithmos solueudo ibidem deductæ sunt, quæ & in Epilogo Regularum in fine addito pariter extensæ habentur. Demonstrationes verò in sphæricis mittere decreui, tum quia habentur in meo Direc. vel Compendio, aut Centuria: tum quia hoc Opusculum in maiorem, quam velim, excresceret molem. Quapropter Lectorem pro demonstrationibus ad præfatos meos Libros, seu ad Maginum in Primo Mobili, aut ad alium quemcunque Authorem ex supracitatis in fine Num. 25 Pralud. Prioris Partis ablegandum esse duxi.*

Cur in Sphæricis demonstrationes prætermittẽtur.

PROBLEMA PRIMVM.

In triangulis sphæricis rectangulis, datis, vltra angulum rectum, duobus quibuscunque; reliqua patefacere.

In rectangulis 16 ad sũmũ sunt Quæsita, & hæc habentur in Epilogo &c.

SEXDECIM varia Quæsita ex duobus quibuscunq; Datis vltra angulum rectum nobis circa triangula sphærica rectangula ad summum contingere possunt, vt consideranti facilè innotescet: pro quibus 16 Regulas per lineas, & alias 16 per Logarithmos exercendas (quæ è meo Directorio, ac Compendio excerptæ sunt) habes in Epilogo in fine adiecto. Illis ergo vtere, substituto Vicario, cum tibi propositum triangulum solutioni ineptum est, & omnem in Rectangulis casum absoluere poteris. Vnicum verò Exemplum pro omnibus sufficiet.

Per Nu. 11 superiorem.

Esto in fig. 22 Meridianus, A B C D, Horizon rectus, B S D, Æquator, A S C, qui in, S, se secant ad angulos rectos, & Ecliptica, I V M, eorum in quam medietates in hæmisphærio orientali, &, V, initium Arietis: vnde fit triangulum sphæricum rectangulum, V S N, in quo, N S, erit declinatio puncti Ecliptica, N, &, S V, eiusdem, seu arcus, V N,

Exemplũ applicatũ sphæræ rectæ, quod fit per primã Regularum Epilogi pro rectangulis sphæricis.

ascensio recta, vt patet ex doctrina sphærica. Supponamus autem arcum, V N, datum esse gr.25.14' Arietis, & quod puncti, M, velimus declinationem indagare, posita maxima Ecliptica declinatione, nempè angulo, S V N, gr.23.32'. Hoc verò in terminis purè Trigonometricis (qualiter hoc, & reliqua in sequentibus exempla illis capienda erunt, qui applicationum fundamenta non intelligunt) non aliud est quam ex data hypotenusa, V N, gr 25. 14', & ex dato angulo adiacente, N V S, gr.23.32', inuenire crus, N S, angulo, S V N, oppositum. Hæc autem sunt & data, & quæsitum ad primam Epilogi Regulam pertinentia: ergo iuxta eam fac vt Radius ad Sinum anguli dati, S V N, ita Sinum datæ hypotenusæ, V N, ad Sinum ignoti cruris oppositi, N S, quæsiti: & hoc siue per lineas multiplicando secundum numerum in tertium, & productum per primum diuidendo (qui est primus modus Prob.5 Trig. planæ) siue per Log. conjiciendo in vnam summam Res. Log. Radij, nempè ciphram, cum Log. secundi, & tertij, & in facta summa delendo vnitatem vltimi loci ad sinistram, iuxta monitum Tabellæ Prob. 5 supradicti (qui est tertius eiusdem modus) vtraq; enim ratione cum facto Sinu, siue Logarithmo inuenietur, N S, declinatio gr.9.48', vt in sequenti calculi forma licet intueri.

In fig. 22	*Per lineas*		*Per Logarith.*
Vt Radius	100000	*r l*	0
Ad anguli dati, S V N, gr.23.32' Sinum	39928	*l*	960128
Ita datæ hypotenusæ gr.25.14 Sinus	42631	*l*	962972
Ad cruris, N S, quæsiti gr.9.48 Sinum	17022	*l*	923100

Porrò ex ijsdem datis inueniri potest, V S, ascensio recta per Epilogi Regulam secundam, qui immò per has, seu reliquas dictarum 16 Regularum quęcunque Problemata ad Sphæram rectam pertinentia (qualia sunt tradita à Magino Libro 5 Primi Mobilis) seu quicunque rectangulorum casus facillimè absoluentur. Delere autem debes semper vnitatem vltimo loco ad sinistram iuxta monitum Tabellæ dicti Prob. 5: est enim in vnaquaq; dictarum Regularum in primo loco Radius.

Axioma secundum Sphæricorum lineare pro Rectangulis.

IN triangulis sphæricis rectangulis, habentibus crura, seu cruribus oppositos angulos, singillatim quadrante minores, vt Tangens cuiuslibet extremæ vicinæ ad Sinum intermediæ: ita Radius ad Tangentem reliquæ extremæ vicinæ.

Et vt Si. 2 cuiuslibet extremæ remotæ ad Sinum intermediæ: ita Radius ad Sinum 2 reliquæ extremæ remotæ.

Vel idem Logarithmicè sic.

LOgarithmus intermediæ, cum Logarithmo Radij, æquatur Mesologarithmis extremarum vicinarum: & Logarithmis secundis extremarum remotarum.

Quod patet, hæc enim sunt proportionalia per idem Axioma lineare, vnde iuxta dicta Num.25 pralud. Trig. planæ, Logarithmi mediorum æquantur Logarithmis extremorum, hoc est &c.

Declaratio.

SI quis multiplicitatem dictarum Regularum Epilogi auersatus cupiat aliquam Regulam generalem ad soluendum quemlibet casum in triangulis sphæricis rectangulis Axioma præcedens siue lineare, siue Logarithmicum memoriæ commendet : est enim Inuentum Neperianum quolibet auro pretiosius, cuius demonstrationem ab eodem Nepero prætermissam attuli ipse in meo Direc. P. 3. Cap. 3. Huius si callueris vsum non erit tibi ad præfatas 16 Epilogi Regulas recurrendum, sed eas Tyronibus renuntiabis. Ad eius verò captum nunc declarandum supereſt quænam pars cuiusq; trianguli sphærici rectanguli dicatur intermedia, & quæ nam extrema vicina, & remota.

Accipiatur ergo ex fig. 22 triangulum ⌣ V S N, ponaturq; seorsim, vt apparet in fig 24: in quo licet sint tres anguli, & tria latera, attamen angulus rectus penitus excluditur, reliquarum verò quinq; partium tres ab ipso angulo recto remotiores, nempè duo anguli obliqui, & hypotenusa in sua complementa sunt commutandæ, & retento pristino ordine omnes quinque in pentagonalem ordinem dispositæ intelligi debent, vt apparet in ipsa fig. 24, in qua ipsi triangulo, V S N, idcircò circumscriptæ fuerunt. Hæ autem sunt quinque partes trianguli, V S N (qua ratione in cæteris quoq; fecerimus) quibus applicatur præfatum Axioma, quamcunq; enim ex illis quinq; assumpseris, vt ex. gr. Comp. hypotenusæ, V N, cum ipsum habeat ad latera duas partes, nempè Comp. anguli, N, ad dexteram, & Compl. anguli, V, ad sinistram, ideò Comp. hypot. V N, dicitur intermedia, & Comp. anguli, V, ac Comp. anguli, N, vocantur extremæ vicinæ. Crus verò, V S, & Crus, S N, dicuntur extremæ remotæ respectu eiusdem Comp. hypotenusæ, V N, intermediæ. At si ponatur Comp. anguli, N, tanquam intermedia: erunt extremæ vicinæ Comp. hypot. V N; & Crus, S N; & extremæ remotæ Crus, V S (nihil impediente angulo recto, S, hunc ordinem, cum ipsum mente ⌣ abstrahamus) & Comp. anguli, V. Quod si poneretur Crus, S N, pro intermedia, essent extremæ vicinæ Crus, V S, & Comp. anguli, N; & extremæ remotæ Comp. anguli, V, & Comp. hypot. V N. Et sic si poneretur pro intermedia Crus, V S, vel Cõp. anguli, V, ex dictis agnoscere posses quænam sint extremæ vicinæ, & quæ remotæ. Manifestum ergo est ex Axiomate (assũpta ex. gr. pro intermedia Comp. hyp. V N) quod vt Tangens extremæ vicinæ cuiusuis, verbi gratia vt Tangens Comp. anguli, V, ad Sinum intermediæ, hoc est ad Sinum Comp. hyp. V N, ita Radius est ad Tang. reliquæ extremæ vicinæ, ideſt ad Tang. Comp. anguli, N: vel per idem Axioma Logarithmicum, quod Logarithmus intermediæ, nempè Log. Comp. hyp. V N, cum Log. Radij, æquatur Mesolog. extremarum vicinarum, hoc est Mes. Comp. anguli, V, cum Mesol. Comp. anguli, N. Ergo dictorum trium datis duobus quibusuis tertius innotescet. Nã si ex. gr. detur Comp. anguli, V, ac Comp hyp. V N, & quæratur Comp. anguli, N, per Axioma lineare fiet vt Tangens Comp. anguli, V, extremæ vicinæ ad Sinum Comp. hyp. V N, intermediæ, ita Radius ad Tang. Comp. anguli, N, hinc notificati. Vel per Axioma Logarithmicũ addes insimul Log. intermediæ, hoc est Log. Comp. hyp. V N, cum Log. Radij, & à summa auferes Mesol. extremæ vicinæ hoc est Comp. anguli, V, & remanebit Mesol. reliquæ extremæ vicinæ, scilicet Comp. anguli, N, hinc notificati. Et hic est secundus modus Prob. 5 Trig. planæ, qui in huius Axiomatis exercitio expeditior videtur: licet posses etiam iuxta tertium modum tres Log. simul addere, hoc est pro Mes. extremæ vicinæ subtrahendo, addere illius Mes. 2 (iuxta Tabellum eiusdem Prob. 5) nempè addere Mes. 2 Comp. anguli, V (qui est Mes. eiusdem anguli, V) cum Log. intermediæ, scilicet cum Logar. Comp. hyp. V N, & cum Log. Radij, & (dẽpta à summa Binario vltimo loco ad sinistram) haberetur itidem Mes. Comp. anguli, N, quæsiti. Non alia ratione ex datis Comp. anguli, N, & Comp. hyp. V N, obtineres Comp. anguli, V, ignoti: sicuti ex datis extremis vicinis Comp. anguli, V, & Comp. anguli, N, notificares Comp. hyp. V N. Licet in hoc casu Axiomatis linearis analogia prioris partis præposteo ordine ⌣ esset disponenda, oporteret nempè facere vt Radius ad Tangentem Comp. anguli, N, extremæ vicinæ datæ ita Tangẽtem Comp. anguli, V, reliquæ extremæ remotæ datæ, ad Sinum Compl. hyp. V N, intermediæ quæsitæ: & hoc vt in Regula Trium quæsitum semper quarto loco reseruetur. Non dissimili ratione si exercendum esset Axioma circa eandem intermediam Comp. hyp. V N, & eius extremas remotas Crus, V S, & Crus, S N, procederes; sicut & in reliquis triplicitatibus, quæ obuenire possunt pro varietate intermediarum, & extremarum, quæ consurgunt, aduertendo cum est sumẽdus Si. 2, vel Ta. 2. Cõp. anguli, vel hyp. quod ille idem est ac Si. vel Ta. eiusdem anguli, vel hyp. Scias autem quod si triangulum ⌣ non esset rectangulum, sed tamen haberet vnum latus æquale quadranti, nihilominus illi dictum Axioma adaptaretur, vt ostendi in Direc loco supracitato, quod tamen hic omittendum duxi, cum circa rectangula ⌣ sufficere possit, & nimis videatur mens defatigari, dum ad tot casus respicere cogitur.

Per priorem partem Axiomatis.

Vt verò Axiomatis vsus clarius percipiatur, Exemplum Prob. ant. reassumatur, in quo ex,

V N, & angulo, V, datis quæsitum est crus, S N, nempè declinatio puncti, N; & propositum sit per hoc Axioma 2 idem crus, S N, inuenire. Quoniam ergo angulus, V, & hyp. V N, commutantur in sua Comp. ideo ex datis Comp. anguli, V, & Comp. hyp. V N, erit inueniendum crus, S N, quæ tria si considerentur in ordine pentagonali dispositæ constituunt vnã triplicitatem, in qua Crus, S N, est intermedia, & Comp. anguli, V, ac Comp. hyp. V N, sunt extremæ remotæ, & hæ sunt datæ, ac quæritur intermedia Crus, S N. Ergo per analogiam posterioris partis Axiomatis præposterè accommodatam (vt veniat quarto loco ipsum quæsitum) fac vt Radius ad Si. 2 Comp. anguli, V, extremæ remotæ (hoc est ad Si. anguli, V) ita Si. 2 Comp. hyp. V N, reliquæ extremæ remotæ (hoc est Si. hyp. V N) ad Sinum Cruris, S N, intermediæ quæsitæ. Vel per Logar. adde Res. Log. Radij cum Log. 2 Comp. anguli, V (hoc est cum Log. V) & cum Log. 2 Comp. hyp. V N (hoc est cum Logar. V N) & (dempta vnitate &c.) fiet Log. cruris, S N, intermediæ quæsitæ, vnde cueniet eadem prorsus calculi forma, quæ allata est in Prob. ant. & propterea eam hic denuò extendere superfluum est.

Quod si ex datis, N V, &, V, velles, V S, notificare triplicitas esset Comp. hyp. V N, & Crus, V S, extremæ vicinæ, & Comp. ang. V, intermedia: vnde quæsitum haberetur per priorem partem Axiomatis. Et si ex, S N, &, V, datis velles, V S, notificare: triplicitas esset Crus, S N, extrema vicina, Crus, S V, intermedia, & Comp. anguli, V, reliqua extrema vicina, vnde haberetur quæsitum per priorem partem Axiomatis præposterè accommodatam. Vides ergo considerandam esse triplicitatem, quæ consurgit ex duobus datis, & quæsito (cõmutatis semper angulis obliquis, & hyp. in sua Comp.) in dicto ordine pentagonali, discernendumq; esse, quæ sit intermedia, & quæ extremæ vicinæ, vel remotæ: tunc enim scis an priori, vel posteriori parte Axiomatis, directè, vel præposterè accepta, ad venandum quæsitum vti debeas. Vnde si huius Axiomatis noueris artificium, in promptu habebis omnium casuum in sphæricis rectangulis solutionem. At si cui videtur difficile omittat illud, & Epilogi Regulas prosequatur. Hactenus verò de sphæricis rectangulis dictum sit, nunc ad obliquangula transeamus.

Axioma tertium Sphæricorum lineare: ac tam rectangulis, quam obliquangulis commune.

IN triangulis Sphæricis vniuersis Sinus crurum sinibus oppositorum angulorum directè sunt proportionales.

Vel idem Logarithmicè.

LOgarithmus cruris cuiuscunque, cum Logarithmo anguli adiacentis, æquatur Logarithmo reliqui cruris, & anguli ipsi adiacentis, prædictis oppositorum.

Declaratio.

SIt ergo in fig. 25 triangulum sphæricum quodcunque, Z S P, dicitur ergo, vt Sinus cruris, Z S, ad Sinum anguli, P, oppositi: ita esse Si. cruris, Z P, ad Si. anguli, S, oppositi. Vel Log. cruris, Z S, cum Logar. anguli, S, æquari Log. cruris, Z P, cum Logar. anguli, P, qui opponitur cruri, Z S, sicuti crus, Z P, opponitur angulo, S. Hoc autem ostenditur in meo Director. P. 3. Cap. 4.

PROBLEMA SECVNDVM.

In triangulis sphæricis obliquangulis datis duobus cruribus, & angulo vni opposito, nota insuper specie anguli reliquo cruri oppositi (cum hic opponitur cruri, quod est propinquius quadranti) reliqua patefacere.

IN eadem fig. 25 intelligatur triangulum, Z S P, factum in superficie primi Mobilis, & in eo, Z, esse zenith, P, polum boreum, &, S, Solem: vnde, Z P, erit comp. altitudinis poli; Z S, comp. altitudinis Solis; S P, distantia Solis à polo; angulus, Z P S, hora astronomica, seu tempora horaria Æquatoris; angulus, P Z S, azimuthalis Solis distantia à Septentrione; & angulus, Z S P, angulus positionis Solis cum zenith, & polo, seu, quem facit circulus declinationis Solis cum eiusdem circulo altitudinis, vt patet ex doctrina sphærica. Sint ergo data crus, Z P, comp. altitudinis poli gr. 25. 13'; crus, Z S, comp. alt. Solis gr. 40. 37', & angulus, S, gr 32. 18', sit etiam nota species anguli, P, qui supponatur acutus (quia crus, Z S, cui opponitur proprius est quadranti, quam, Z P, & ideo dubium est an cum eo specie concordet, vel non, cum quo tamen certissimè concordaret, si non esset altero crure quadranti propinquius, vt ego ostendi in Direc. P. 3, Cap. 4 ad Regulam septimam generalem in obliquangulis) quique primò inquiratur. Sic ergo per Axioma tertiam Regulam trium instituemus tam per lineas, quam per Log. inueniemusq; angulum, P, horę astronomicæ gr. 54. 44', vt in hac calculi forma videri potest. Et aduerte per Log. positum esse in primo loco Tomolog. 2 graduum 25. 13', addendum cum Log. 972783, & 981358, & à summa Binarium vltimo loco ad sinistram prætermissum fuisse, iuxta Tabellam Prob. 5 Trig. planæ.

Hanc cautionem in Regulis Epilogi omisi, maioris facilitatis gratia; & quia supponere speciem quæsiti etiã, cum non est necessarium nullum præiudicium affere potest.

In fig. 25	*Per lineas*		*Per Logarith.*
Vt cruris dati, Z P, gr. 25. 13' Sinus	42604	*t 2*	1037055
Ad anguli dati, Z S P, gr. 32. 18 Sinum	53435	*l*	972783
Ita cruris dati, Z S, gr. 40. 37 Sinus	65099	*l*	981358
Ad anguli quæsiti, Z P S, gr. 54. 44 Sinum	81649	*l*	991196

Num. 6 præl. Inuento, S, si demittatur à, Z, vertice trianguli, S Z P, perpendicularis arcus, Z A, super, S P, is cadet intra, vt in, A, quia anguli, S, P, positi sunt acuti. Vnde ex, Z P, & angulo, P, notis inueniemus per Reg. 2 Epilogi pro Sphæricis rectangulis, vel per Axioma secundum arcum, P A, gr. 15. 13': & per tertiam angulum, P Z A, gr. 38. 1'. Similiter ex, Z S, & angulo, S, inueniemus, S A, 35. 55', &, S Z A, gr. 64. 22': vnde, S P, aggregatum ex inuentis, P A, A S, nempè basis, erit gr. 51. 8', &, S Z P, aggregatum ex inuentis, P Z A, A Z S, nempè angulus verticalis, erit gr. 102. 23'. *Nota.* *Aduerte autem si angulus, P, fuisset suppositus obtusus, quod tunc perpendiculum extra triangulum, Z S P, cecidisset per Numerum 6 præ'ud. vnde basis fuisset non aggregatum, sed differentia inuentorum arcuum; & angulus verticalis, differentia inuentorum angulorum. Vt si fingamus polum esse in, B, triangulumque, Z B S, & angulum, Z B S, obtusum: inuenientur enim, vt supra, arcus, B A, A S, quorum differentia, B S, erit basis quæsita: necnon anguli, B Z A, S Z A, quorum differentia, S Z B, erit angulus verticalis quæsitus. Recordare autem substituendi trianguli Vicarij, cum incides in triangulum, quem soluere non possis: inuentio enim anguli, P, quæ fit per dictum Axioma tertium libera est, at basis, & angulus verticalis, cum per rectangulorum leges inquirantur, earundem conditionibus sunt alligata.*

PROBLEMA TERTIVM.

In ijſdem datis duobus angulis, & crure vni eorum oppoſito, nota inſuper ſpecie cruris reliquo datorum oppoſiti (cum hoc opponitur angulo, qui eſt propinquior quadranti) reliqua patefacere.

IN eadem fig. 25 dentur nunc anguli, vt ſupra, S, quidem gr. 32. 18', crus, Z P, gr. 25. 13, & angulus, P, gr. 54. 44', ſit verò inſuper nota ſpecies quæſiti cruris, Z S, quod ſit quadrante minus (& hoc quia opponitur angulo, P, qui eſt propior quadranti, quam, S) Sic ergo inſtituemus Regulam Trium iuxta dictum Axioma tertium per quam itidem inueniemus crus, Z S, gr. 40. 37'. Quo habito ſubinde, P S, & angulus, P Z S, vt in ant. Prob. factum eſt notificabuntur. In ſequenti calculo autem per Log. pro Log. ſubtrahendo ponitur quoque Tomologar. 2 addendus iuxta Prob. 5 Trig. planæ.

In fig. 25.	*Per lineas*		*Per Logarith.*
Vt anguli dati, S, gr. 32. 18' Sinus	53435	*t 2*	1027217
Ad cruris dati, Z P, gr. 25. 13 Sinum	42604	*l*	962945
Ita anguli dati, P, gr. 54. 44 Sinus	81649	*l*	991194
Ad, Z S, quæſiti cruris gr. 40. 37 Sinum	65099	*l*	981356

Axioma quartum Sphæricorum lineare.

IN triãgulis ſphæricis vniuerſis vt quadratum Radij eſt ad rectangulum ſub Sinibus quorumuis crurum; ita Sinus verſus anguli verticalis eſt ad differentiam duorum Sinuum verſorum, quorum vnus eſt baſis, alter verò differentiæ crurum.

Declaratio.

IN triangulo, Z P S, figuræ 25 aſſumantur pro crutibus quæcunque duo latera, vt, Z P, P S: dicitur ergo vt quadratum Radij eſt ad rectangulum, ſeu factum ſub Sinibus crurum, Z P, P S: ita Sinum verſum anguli verticalis, Z P S, eſſe ad differentiam duorum Sinuum verſorum, quorum vnus eſt baſis, Z S, alter verò differentiæ crurum, Z P, P S, vt ipſius, B S, ſi, Z P, P B', ponerentur æquales. Hoc verò oſtenditur à Regiomontano, Magino, pluribuſq; alijs, vt & demonſtratur in meo Directorio P. 3, Cap. 6. Dictus Maginus autem in Primi Mobilis lib. 1 rationes affert eorum, quæ in ſequentibus quinq; Corollarijs, è præfato quarto Axiomate fluentibus explicantur.

Corollarium primum.

COlligitur ergo primò in eodem triangulo, Z P S, quod si fiat, vt Radius ad Sinum cruris, Z P, ita Sinus cruris, S P, ad Inuentum primum erit deinde vt Radius ad Inuentum primum ita Sinus versus anguli verticalis, Z P S, ad differentiam Sinuum versorum basis, Z S, & differentiæ crurum, Z P, P S, quam dicemus Inuentum secundum.

Corollarium secundum.

COlligitur secundò quadratum Radij esse ad rectangulum sub Sinibus duorum angulorum, P S Z, P Z S, basi, Z S, adiacentium, vt Sinus versus basis, Z S, est ad differentiam duorum Sinuum versorum, quorum vnus est anguli verticalis, Z P S, alius verò est differentiæ alterutrius angulorum, P S Z, P Z S, vt ipsius, P S Z, & supplementi reliqui, P Z S. Hoc idem autem, & ipse demonstro in Direct. P. 3, Cap. 6.

Corollarium tertium.

VNde colligitur tertiò, quod si fiat vt Radius ad Sinum alterutrius angulorum, P S Z, P Z S, vt ad Sinum, P S Z, ita Sinus reliqui, P Z S, ad Inuentum primum. Erit deinde vt Radius ad Inuentum primum, ita Sinus versus basis, Z S, ad differentiam duorum Sinuum versorum, quorum vnus erit anguli verticalis, Z P S, alius verò differentiæ alterutrius angulorum, P S Z, P Z S, vt ipsius, P S Z, & supplementi reliqui anguli, P Z S, quam dicimus Inuentum secundum.

Corollarium quartum.

COlligitur quartò, quod si fiat è conuersò vt Radius ad Secantem secundam cuiusuis cruris, vt, Z P, ita Secans secunda reliqui cruris, P S, ad Inuentum: erit deinde vt Radius ad Inuentum, ita differentia Sinuum versorum basis, Z S, & differentiæ crurum, Z P, P S, ad Sinum versum anguli verticalis, Z P S.

Corollarium quintum.

COlligitur quintò si fiat vt Radius ad Secantem secundam cuiusuis angulorum basi adiacentium, vt ipsius, P S Z; ita Secans secunda reliqui anguli, P Z S, ad Inuentum: erit deinde vt Radius ad Inuentum, ita differentia duorum Sinuum versorum, quorum vnus erit anguli verticalis, Z P S, alter verò differentiæ alterutrius augulorum, P S Z, P Z S, vt ipsius, P S Z, & supplementi reliqui anguli, P Z S, ad Sinum versum basis, Z S.

PROBLEMA QVARTVM.

In triangulis sphæricis obliquangulis datis cruribus, cum angulo verticali, basim inuenire.

HOC Problema præstantissimum est in Geographia, & in Astronomia, per illud enim, datis duarum Ciuitatum longitudinibus, ac latitudinibus facilè earum distantia in circulo maximo per eas transeunte inuenitur. Sicuti datis duarum stellarum longitudinibus, & latitudinibus: seu declinationibus, & ascensionibus rectis, pariter earum distantia fit nota. Quemadmodum docent exempla posita in mea Centuria Probl. 35, & 50. Nunc vero vnicum sufficiet Exemplum ad inueniendam distantiam inter Bononiam, & Babylonem, datis earum longitudinibus, & latitudinibus, quod quadrupliciter soluemus. Primò vtentes Corollario primo, Axiomatis quarti, quod est lineare. Secundò idipsum per Logarithmos exercentes. Tertiò per triangula rectangula. Quartò aliter per Logarithmos.

Intelligatur ergo nunc triangulum, Z S P, fig. 25, ita vt, P, sit adhuc polus Mundi boreus, Z, verò Bononiæ zenith cuius longitudo est ferè gr. 36. 30', & latitudo ferè gr. 44. 0; &, S, zenith Babylonis, cuius longitudo est ferè gr. 73. 0, & latitudo ferè gr. 35. 0, vnde dempta Bononiæ longitudine gr. 36. 30' ex longit. Babylonis gr. 73. 0', remanet earum differentia longitudinum, nempè angulus, Z P S, gr. 36. 30'. Similiter, P Z, comp. latitudinis Bononiæ erit gr. 46. 0: &, P S, comp. latitudinis Babylonis gr. 55. 0', vnde differentia crurum, Z P, P S, erit gr. 9. 0'. Inuenienda ergo est basis, Z S, correspondens earundem Ciuitatum distantiæ iuxta dictos quinq; modos.

Primus, & secundus modus per Corollarium primum supradictorum lineariter, & Logarithmicè vsurpatum procedens.

PRimo ergo, & secundo modo duplicem institue Regulam Trium, vt vides in inferiori calculi forma. Nempè fac vt Radius ad Sinum cruris, Z P, ita Sinum crutis, P S, ad Inuentum primum, & hoc tam per lineas, quam per Log. more solito. Deinde fac vt Radius ad inuentum primum, ita Sinum versum anguli verticalis (quem Sinum versum didicisti inuenire in Prob. primo Trig. planæ) ad Inuentum secundum pariter tam per lineas, quam per Log. Porrò Log. 906286 dabit tibi Inuentum secundum 11558 (quod est differentia duorum Sinuum versorum, quorum vnus est basis, alter differentiæ crurum, vt inquit Corollarium primum) siue illum quæras inter Logarithmos Canonis, numerus enim 11558 tibi offeretur è regione in columna Sinuum (adhibita tamen parte proportionali &c.) siue illum inquiras inter Logar. Chiliadis, mutata Carac. 9 in 2 iuxta P ob .4, immediate enim capies ex Tabula numerum 115, & deinde per partem proportionalem relictas quoq; notas, & subinde totum numerum 11558 etiam hoc modo poteris obtinere. Denlq; differentiæ crurum, Z P, P S, quæ est gr. 9. 0' inuenies Sinum versum, vt didicisti in dicto Prob. primo, Trig. planæ, quem addes Inuento secundo nempè ipsi 11558, & fiat 12789 Sinus versus graduum 29. 18', basis, Z S, quæsitæ. Intellexisti n. quomodo dati Sinus versi inueniatur arcus ex Prob. secundo, Trig. planæ. Distantia ergo inter zenith Bononiæ, & Babylonis, & consequenter inter vtrasq; Ciuitates in circulo maximo per eas transeunte erit gr. 29. 18', & si cuilibet minuto tribueris vnum milliare Italicum, ideſt si ipsos gr. 29. 18' multiplicaueris per 60, prodibunt milliaria 1758 inter Bononiam, & Babylonem. Hoc verò Corollarium eodem modo vsurpabitur qualiscunque sit angulus verticalis, & qualiacunq; sint crura, nulla enim casuum obseruatione indiget.

Babylonis longitudo gr. 73. 0'. Latitudo gr. 35. 0'. Comp. gr. 55. 0' *Bononiæ longitudo gr 36. 30. latitudo gr. 44. 0. Comp. gr. 46. 0 Differ. long. angulus, Z P S, gr. 36, 30. Differ. lat. seu, S P, Z P, gr. 9. 0.*

Recordare prætermittẽdam esse vnitatem in sũma, cum fiãt Logarithmorum additiones, propter Resi. Log. Radij, iuxta monitum Talellæ Prob. 5 Trig. planæ.

In fig. 25.	*Per lineas*		*Per Logarith.*
Vt Radius	100000	*r l*	0
Ad dati cruris, Z P, gr.46. 0' Sinum	71934	*l*	985693
Ita dati cruris, P S, gr.55.0 Sinus	81915	*l*	991336
Ad *Inuentum primum*	58925	*l*	977029
Deinde			
Vt Radius	100000	*r l*	0
Ad Inuentum primum	58925	*l*	977029
Ita anguli dati verticalis, Z P S, gr.36.30 Si. ver.	19614	*u*	929257
Ad *Inuentum secundum*	11558	*l*	906286
Differentiæ crurum, Z P, P S, gr.9.0 Sin. versus	1231		
Basis, Z S, distantiæ quæsitæ inter Bonon. & Babyl. gr.29. 18' Si.ver.	12789		

Tertius modus per reductionem ad triangula rectangula.

DEmisso ab alterutro extremorum, Z, S, datorum crurum, vt à, Z, super, P S, reliquum crus perpendiculari arcu, Z A: ex datis hypotenusa, Z P, & angulo, P, in triangulo rectangulo, Z P A, per primam & secundam Regularum Epilogi pro Sphæricis rectangulis, siue linearem, siue Logarithmicam, inuenies, P A, gr. 39. 46', &, Z A, gr. 25. 20'. Deinde conferes Inuentum, P A, cum, P S, demendo minorem ex maiori (cum enim fuerit, P A, arcus inuentus, minor crure, P S, perpendiculum cadet intra triangulum, vt nunc contingit; & si esset eo maior, caderet extra) & relinquetur, A S, gr. 15. 14'. Tandem in triangulo rectangulo, Z A S, ex datis cruribus, Z A, gr. 25. 20', &, A S, gr. 15. 14' per 13 supradictarum Regularum inuenietur basis, Z S, gr. 29. 18', vt supra.

Posses etiam, inuento tantum, P A, &, A S, facere vt Si. 2, P A, ad Si. 2, A S, ita Si. 2, Z P, ad Si. 2, Z S, hinc notificatam. Hoc est posses prius inuenire, P A, per secundam supradictarum Regularum iungendo Tomolog. anguli verticalis, Z P S, cum Mes. 2 cruris, Z P, fieret enim (dempta vnitate &c.) summa, quæ esset Mes. 2 arcus, A P: & per eius subtractionem, tanquam minoris, à, P S, habito, A S, si simul iungeres Tomolog. ipsius, P A (pro Log. 2 eiusdem, qui esset subtrahendus, & hoc iuxta Tabellam Prob. 5 Trig. planæ) cum Log. 2, A S, & cum Log. 2, Z P, fieret summa, quæ (dempto Binario &c.) esset Log. 2 ipsius, Z S, cuius speciem scires ex cruribus, Z A. A S, si enim in specie concordarent esset, Z S, quadrante minor, & si non, esset quadrante maior, per Conuersum Reg. secundæ Num. 8 prælud. Ipsius verò, Z A, speciem agnoscas ex angulo verticali, Z P S, cum quo specie concordabit per Reg. primam dicti Nu. 8 prælud. Recordare tamen trianguli Vicarij substituendi, cum incideris in triangulum rectangulum, quod solui non possit. Vide nunc calculi formam iuxta proximè dicta, quæ procedit per Log. licet etiã per lineas iuxta dicta intelligatur quomodo fieri possit.

Hoc ostenditur in Direc.

P. 3, Cap. 5, lem. primo.

In nostro exẽplo, Z S, est quadrante minor, quia, Z S, A S, in specie concordant, sunt singillatim quadrante minores.

In fig. 25.			*Per Logarithmos.*		
Anguli verticalis, X P S,	*gr.* 36.30'	*t*	1009482		
Cruris minoris, Z P,	46. 0	*m 2*	998484	*l 2*	984177
Inuentum primum, A P, subtr.	39.46	*m 2*	1007966	*t*	1011427
Crus maius, P S,	55. 0				
Inuenti secundi, A S,	15.14			*l 2*	998447
Basis, Z S, distantiæ quæsitæ inter Bonon. & Babyl.	29.19			*l 2*	994051

Quartus modus aliter per Log. procedens, dummodo crura sint singillatim quadrante minora.

PRimò conijce in vnam summam duos Log. semianguli verticalis, & Logarithmos crurum, cum Tomolog. differentiæ eorundem crurum, & fiet (relicta vltimo loco ad sinistram in facta summa tantum vnitate, ac reliquis vnitatibus, quæ ibidem scribendæ forent, prætermissis) summa, cuius dimidio tanquam Logarithmo respõdens arcus semper quadrante minor, dùplandus erit.

Secundò huius dupli arcus Logarithmum secundum iunges cum Log. 2 dictæ differentiæ crurum, & fiet Log. 2 arcus, qui erit quæsita basis, cum arcus duplus erit quadrante minor. Cum verò ille fuerit quadrante maior, basis erit inuenti arcus supplementum. Esletq; quadrans, si ille esset quadrans. Basis inquam sequitur arcus dupli speciem, quem idcirco tali asterisino notabimus *.

Huius autem Regulæ ratio habetur in mea Centuria Prob. 36, vbi quoq; exemplificatur. Aduerte tamen ibi sumi Resol. Log. 2 differentiæ crurum, quia in Tabella Centuriæ adiecta non habentur Tomolog. qui seruiunt pro Resol. Logar. 2, sicuti Tomolog. secundi seruiunt pro Resol. Log. eorundem arcuum, vel angulorum, vt ex dictis ad finem Prob. 5 Trig. planæ colligi potest. Hic verò pro dicto Resol. Log. 2 differentiæ crurum sumimus idcirco Tomologar. eiusdem. Hinc si quis voluerit se exercere in Problematibus Centuriæ, vel in Regulis Compendij, aut Praxis Astrologicæ pro Directionibus, poterit vbicunq; præcipitur alicuius arcus, vel anguli sumendum esse Resol. Log. sumere eiusdem Tomolog. & pro Resol. Log. sumere Tomolog. 2, & tunc in facta summa non vnam, sed duas prætermittere vnitates opus erit, iuxta monitum Tabellæ Prob. 5. Trig. planæ. Vide nunc calculi formam, in qua duplex, ll, significat illam summam, cui præfigitur, æquualere duobus Logarithmis, nempè dimidiandam esse, vt habeatur simplex Logar. ad huius ergo imitationem quæcunq; alia Exempla facere poteris.

Nota pro Resol. Log. 2 adhibito in Centuria, hic substitui Tomolog. & pro Resol. Logar. Tomolog. 2.

In fig. 25.			*Per Logarith.*
Semianguli verticalis, Z P S,	*gr.* 18. 15′	*l*	949577
Idem Logarithmus		*l*	949577
Cruris maioris, S P,	55. 0	*l*	991336.
Cruris minoris, P Z,	46. 0	*l*	985693
Differentiæ crurum, S P, P Z,	9. 0	*t*	1000538
Dimidia hanc summam		*ll*	1876721
Arcus respondentis semper quadrante minoris	14. 0	*l*	938360
* *Arcus dupli*	28. 0	*l 2*	994593
Differentiæ crurum, S P, P Z,	9. 0	*l 2*	999462
Basis, Z S, distantiæ quæsitæ inter Bon. & Bab.	29. 18	*l 2*	994055

PROBLEMA QVINTVM.

In triangulis sphæricis obliquangulis, datis cruribus, cum angulo verticali, reliquos angulos inuenire.

Primus modus per triangula rectangula.

IN eodem triangulo, Z S P, figuræ 25 dentur eadem, quæ in Prob. ant. quæratur autem alteruter angulorum, Z, S, vt, S. Demisso ergo à, Z, extremo cruris quæsitum angulum subtendentis perpendiculo, Z A: ex, Z P, &, P, inuenie-mus, vt supra ipsum, P A, gr. 39. 46′, &, Z A, gr. 25. 20′. Deinde conferemus inuentum, P A, cum, P S (si enim, P A, minor est, quam, P S, perpendiculũ cadit intra triangulum, Z P S, & si est maior, cadit extra) demptoq; minori ex maiore, relinquetur, A S, gr. 15. 14′. Quæ omnia habes iam in tertio modo Problematis ant. Deniq; in-

triangulo, Z A S, rectangulo ex cruribus datis, Z A, gr.25. 20', &, A S, gr.15.14' inuenies angulum, S, cruri, Z A, oppositum gr.60.58' per Regulam 14 sphæricorum rectangulorum Epilogi. Cum tamen perpendiculum cadit extra triangulum, angulus quæsitus erit inuenti anguli supplementum.

Arcus, P A, &, A S, in Direc. vocãtur Casus per-

Posses etiam, inuento tantum, P A, &, A S, facere per Lem. 5 Cap. 5 Partis 3 mei Direc. vt Sinus, P A, ad Sinum, A S, ita Tangentem 2 anguli verticalis, P, ad Tang. 2 anguli, S. Hoc est per Log. conjcere in vnam summam Tomolog. 2, P A (pro Log. P A, qui esset subtrahendus) cum Log. A S, & cum Mesol. 2 anguli verticalis, P (subintellige cum Mes. excessus eiusdem supra quadrantem, cum est quadrante maior) & fieret summa (dempto Binario &c.) Mes. 2 anguli, S, quæsiti, cum perpendiculum cadit intra, vt nunc. Cum enim cadit extra angulus quæsitus est inuenti anguli suppl. vt supra dictum est. Vide autem hic integram calculi formam, in qua inuenitur pariter angulus, S, gr.60. 58', qui est angulus positionis Bononiæ, Z, respectu Babylonis, S.

pendiculi, Z A.

In fig. 25.		*Per Logarithmos.*			
Anguli verticalis, Z P S,	gr. 36.30	*t*	1009482	*m* 2	1013079
Cruris minoris, Z P,	46. 0	*m* 2	998484		
Inuentum primum, A P, subtr.	39.46	*m* 2	1007966	*t* 2	1019405
Crus maius, P S,	55. 0				
Inuenti secundi, A S,	15.14			*l*	941954
Anguli, S, quæsiti, positionis Bonon. ad Babyl.	60.58			*m* 2	974438

Secundus modus aliter per Logarith. procedens, supponens tamen crura insimul semicirculo minora, quo vtriq; anguli ad basim vno actu inueniuntur.

PRimò Tomolog. semisummæ crurum iunge cum Log. 2 semidifferentiæ eorundem, & cum Mes. 2 semianguli verticalis, & fiet (dempto Binario &c.) Mes. semisummæ angulorum ad basim.

Secundò Tomolog. 2 semisummæ crurum iunge cum Logar. semidifferentiæ eorundem, & cum Mes. 2 semianguli verticalis, & fiet (dempto Binario &c.) Mes. semidifferentiæ angulorum ad basim.

Tertiò adde semidifferentiam semisummæ, & fiet angulus maior: deme, & fiet minor.

Huius Regulæ ratio pendet ex conuerso prop. illius famosæ Neperianæ, quã ostendi ego in meo Compendio, Centuriæ Problematum adiecto, pag. 114 (in qua tamen pag. 116 linea 8 dele hæc verba; che si supponga hora rettangolo in, F) *vt enim in eius Cor. 2 deduxi, manifestum est quod, vt Sinus 2 semiaggregati crurum est ad Si 2 semidifferentiæ eorundem: ita Ta. 2 semianguli verticalis est ad Tangentem semisummæ angulorum ad basim. Et vt Sinus eiusdem semiaggregati crurum ad Sinum eorundem semidifferentiæ: ita Ta. 2 semianguli verticalis est ad Ta. semidifferentiæ angulorum ad basim: quæ addita semisummæ dat angulum maiorem, & dempta, dat minorem. Hanc verò posui in Epilogo vt tam per lineas, quam per Logarithmos, vt nunc exemplificabitur, posimus operari. Vide ergo calculi formam eadem superius data supponentis, in qua angulus maior, Z, inuenitur gr.95. 15, & minor, S, gr.60.59', ferè vt supra quoq; inuentus fuit.*

Hæc est vltima earũ, quæ inter Neperi Prop. Trigon. eminentissimas recenseturr, quam & Briggius præstantissimam dyudicauit, quamque publici iuris effecit Robertus Neperi dilius, & ego demonstraui in meo Compendio pag. 114.

In fig. 25.

Crus maius, S P,	*gr.* 55. 0
Crus minus, Z P,	46. 0
Summa eorundem	101. 0
Differentia	9. 0
Semisumma	50.30
Semidifferentia	4.30
Semianguli verticalis, Z P S,	18.15
Semisummæ angulorum, Z, S,	78. 7
Semidifferentiæ eorundem, Z, S,	17. 8
Angulus maior, Z,	95.15
Angulus minor, S,	60.59

Adde, & deme.

Per Logarithmos.

t	1019649	*t 2*	1011259
l 2	999866	*l*	889464
m 2	1048181	*m 2*	1048181
m	1067696	*m*	948904

PROBLEMA SEXTVM.

In triangulis sphæricis obliquangulis, data basi, cum duobus angulis adiacentibus, angulum verticalem notum facere.

SINT in fig. 26, Z, S, duę stellæ, &, P, polus, sitq; nota earum distantia, Z S, in circulo maximo per eas transeũte, quę sit gr. 64.59', basis trianguli sphęrici obliquanguli, Z S P: sit insuper notus angulus, Z S P, gr. 21.40', &, S Z P, gr. 122. 48': & ex his datis quæratur angulus ad polum, nempè angulus verticalis, Z P S, qui metitur differentiam ascensionum rectarum earundem stellarum. Hunc ergo quadruplici modo inquiremus, conformiter quatuor modis, quibus in Prob. 4 vsi sumus.

Primus, & secundus modus per Corollarium tertium Axiomatis quarti, lineariter, & Logarithmicè vsurpatum.

PRimò fac vt Radius ad anguli, S Z P, gr. 122.48', vel eius supplementi gr. 57. 12' Sinum: ita anguli, S, gr. 21.40' Sinum, ad Inuentum primum.

Secundò fac vt Radius ad Inuentum primum, ita basis, Z S, Sinum versum, ad Inuentum secundum. Et hoc vel lineariter, vt docet dictum Coroll. tertium, vel Logarithmicè, vt apparet in sequenti calculi forma.

Tertiò differentiæ anguli, S, gr. 21. 40', & supplementi anguli, S Z P, gr. 57. 12', quę est gr. 35. 32' Sinui versum adde Inuento secundo, & proueniet Si. versus anguli verticalis, Z P S, quem inuenies gr. 50. 36'. Recordare autem vnitatis prætermittendæ in duabus additionibus Logarithmorum, propter additionem Rel. Log. Radij, vt monet Tabella Prob. 5 Trig. planæ.

In fig. 26.	*Per lineas*		*Per Logarith.*
Vt Radius	100000	*r l*	0
Ad anguli, S Z P, gr.122. 48', seu eius supplementi gr. 57. 12' Sinum	84057	*l*	992457
Ita anguli, S, gr.21.40' Sinus	36921	*l*	956727
Ad Inuentum primum	31035	*l*	949184
Deinde.			
Vt Radius	100000	*r l*	0
Ad Inuentum primum	31035	*l*	949184
Ita basis, Z S, gr.64. 59' Sinus versus	57712	*u*	976127
Ad Inuentum secundum	17911	*l*	925311
Adde. Differentiæ anguli, S, & suppl. S Z P, gr.35. 32' Sinus versus	18622		
Anguli verticalis quæsiti, Z P S, gr.50.36' Sinus versus	36533		

Tertius modus per reductionem ad triangula rectangula.

DEmisso ab alterutrius angulorum ⌣ PSZ, PZS, puncto, S, Z, vtà, Z, perpendiculo, Z A, primò ex hypotenusa ⌣ Z S, gr.64.59', & angulo adiacente, S, gr.21. 40', inueniemus in triangulo rectangulo, Z A S, crus oppositum angulo, seu perpendiculum, Z A, gr.19. 33' per primam Regularum Epilogi pro sphæricis rectangulis. Secundò ex crure, Z A, gr.19. 33', & angulo, S, illi opposito gr.21. 40' (qui in specie concordant iuxta Reg. primam Nu. 8 prælud.) ac specie anguli, S Z A (quam non ignoras, nam cum sit hyp. Z S, quadrante minor anguli, S Z, in specie concordare debent per Regulam secundam dicti Num. 8 prælud. sicuti si esset quad. maior, minimè concordarent) inuenies per Reg. 12 ipsum angulum, S Z A, gr. 80.28', qui cum sit minor angulo, S Z P, qui est gr.122.48', ostendit perpendiculum, Z A, cadere intra triangulum, S Z P. Dempto ergò, S Z A, ex, S Z P, remanebit, A Z P, gr.42.20'. Deniq; tertiò ex, Z A, gr.19 33', & angulo, A Z P, gr. 42.20' inuenies angulum verticalem ⌣ quæsitum, Z P A, gr.50. 36'. Quod si perpendiculum, Z A, caderet extra (vt contingeret si propositum triangulum esset ex. gr. Z S B) tunc vltimò inuentus angulus esset, Z B A, sed verticalis quæsitus esset illius suppl. nempè, Z B S.

Posses etiam compendiosius procedere, si primò in triangulo rectangulo, Z S A, ex hyp. Z S, & angulo adiacente, S, inuenires per tertiam Regulam Epilogi pro sphæricis rectangulis reliquum angulum, S Z A, gr.80. 28'. Secundò, vt supra, ipsum demeres ex, S Z P (vel è contra, si esset inuentus angulus maior, S Z P, hunc ex illo subtraheres) relinqueretur enim, A Z P. Tertiò tandem quoniam per Lemma secundum, Cap.5, T.3. Directorij Sinus anguli, S Z A, ad Sinum, A Z P, est vt Sinus 2 anguli, Z S A, ad Si. 2 anguli, Z P A: ideo si simul adderes hos tres Log. nempè Tomolog. 2 anguli, S Z A (pro eius Log. qui esset subtrahendus iuxta Tabellam Probl. 5 Trig. planæ) cum Log. A Z P, & cum Log. 2, Z S A, fieret (dempto Binario &c.) Log. 2 ipsius, Z P A (vel ipsius, Z B A, pro triangulo, Z S B) qui cum perpendiculo, Z A, & subinde cum angulo, S, specie concordaret. Inuenies ergo ipsum, Z P A, gr.50. 36, vt patet in sequenti calculi forma. Ne obliuiscaris autem trianguli Vicarij substituendi, cum incideris in triangulum rectangulum, quod solui non possit.

In fig. 26.			*Per Logarithmos.*		
Hyp. datæ, Z S,	gr. 64.59	*l 2*	962622		
Anguli, Z S A, dati	21.40	*m*	959909	*l 2*	996818
Anguli, S Z A, Inuenti primi subtr.	80.28	*m 2*	922531	*t 2*	1000604
Reliquus, S Z P,	122.48				
Ang. A Z P, Inuenti secundi	42.20			*l*	982830
Ang. Z P A, verticalis quæsiti	50.36			*l 2*	980252

Quartus modus aliter per Logarith. procedens; dummodo anguli baſi adiacentes ſint acuti.

PRimò conijce in vnam ſummam duos Log. 2 ſemibaſis, cum Log. datorum angulorum, & cum Tomolog. differentiæ eorundem angulorum, & exibit (relicta vltimo loco ad ſiniſtram tantum vnitate) ſumma, cuius dimidio tãquam Logarithmo reſpondens arcus, ſemper quadrante minor, duplandus erit.

Secundò huius dupli arcus Logar. 2 iunges cum Log. 2 differentiæ eorundem angulorum, & fiet (dempta vnitate &c.) Logarith. 2 anguli, qui erit angulus verticalis quæſitus, cum arcus duplus erit quadrante maior. Cum verò ille erit quadrante minor, tunc ſuppl. inuenti anguli erit angulus verticalis quæſitus. Angulus inquam verticalis ſpecie contratiabitur ſemper arcui duplo, cui idcirco præfigimus aſteriſmum *.

Hæc eadem Regula, eius conſors, quæ tradita eſt ad quartum modum Prob. 4, probatur per Prob. 36 meæ Centuriæ. Quoniam verò poſtulat duos datos angulos acutos, hic verò, S Z P, eſt obtuſus, ideò Vicarium ſolutioni ſubſtituendum eſt, quod adiacet cruri, Z P, acutum, S, reſpicienti iuxta Num. 12 prælud. Ergo continuatis arcubus, S Z, S P, vſq; ad concurſum in, C, orietur triangulum ſphæricum obliquangulum, C Z P, Vicarium ipſius, Z S P, pro eo nobis ſoluendum, in quo erit baſis, Z C, ſuppl. S Z, gr. 115. 1', & ei adiacentes anguli dati erunt, & acuti, nempè, C, æqualis ipſi, S, gr. 21, 40', &, P Z C, ſuppl. ipſius, P Z S, gr. 57. 12', ex quibus venabimur per ſuprapoſitam Regulam angulum verticalem, Z P C, quem inueniemus gr. 129. 24', cuius ſuppl. Z P S, erit idcirco gr. 50. 36', angulus verticalis quæſitus, vt patet in ſequenti calculi forma.

In fig. 26.			*Per Logarith.*
Semibaſis, Z C,	gr. 57.30 1/2	*l* 2	973012
Idem Log. 2		*l* 2	973012
Anguli maioris, P Z C,	57.12	*l*	992457
Anguli minoris, Z C P,	21.40	*l*	956727
Differentiæ eorundem	35.32	*t*	1008949
Dimidia hanc ſummam		*ll*	1904157
Arcus reſpondentis ſemper quadrante minoris	19.22 1/2	*l*	952078
Arcus dupli	38.45	*l* 2	989203
Differentiæ angulorum datorum	35.32	*l* 2	991051
Anguli inuenti	50.36	*l* 2	980254
Eius ſupil. Z P C,	129.24		
Vnde, Z P S, quæſitus ang. verticalis eſt	50.36		

PROBLEMA SEPTIMVM.

In triangulis sphæricis obliquangulis, data baſe, cum duobus angulis eidem adiacentibus; vtrumuis crurum inuenire.

Primus modus per triangula rectangula.

IN eodem triangulo, Z S P, fig. 26 dentur eadem, quæ in Prob. ant. quæratur autem alterutrum crurum, Z P, P S, vt, Z P. Demiſſo e.go à puncto, Z, anguli quæſito cruri adiacentis perpendiculo, Z A, primò in triangulo, Z S A, ex data hyp. Z S, gr 64. 59', & angulo adiacente, Z S P, gr.21. 40', inueniemus vt in Probl. ant. crus, Z A, gr.19. 33, & angulum reliquum, S Z A, gr.80. 28'. Deinde collato, S Z A, cum dato angulo, S Z P, minorem ex maiore ſubtrahemus (cadet enim perpendiculum intra triangulum, Z S P, cum, S Z A, fuerit minor, quam, S Z P: & extra, cum erit maior) nempè in noſtro caſu auferemus, S Z A, gr.80.28' ex, S Z P, gr.122. 48', reſtabitque, A Z P, gr. 42. 20'. Tandem ex crure, A Z, gr.19. 33', & angulo adiacente, A Z P, gr.42. 20', per 9 Regularum Rectangulorum Epilogi, inueniemus in triangulo rectangulo, Z A P, hypot Z P (quæ eſt crus in triangulo obliquangulo, Z S P) gr.25. 39, quæſitam.

Poſſes etiam compendioſius, vt in Prob. ant. ex, Z S, &, S, inuenire, S Z A, & per ſubtractionem eius ab, S Z P, ipſum, A Z P, deinde per Lemma 4 Cap. 5 P. 3 Circ. poſſes facere vt Sinus 2 anguli, S Z A, gr.80.28', ad Sinum 2 anguli, A Z P, gr.42. 20': ita Ta.2 baſis, Z S, ad Ta.2, Z P; nempè Logarithmicè poſſes addere ſimul hos tres Log. ſcilicet Tomolog. anguli, S Z A (pro eius Log. 2, qui eſſet ſubtrahendus) cum Log. 2 anguli, A Z P, & cum Meſ 2 baſis, Z S: fieret enim (dempto Binario &c.) Meſ. 2 arcus, qui eſſet ipſe, Z P, ſi anguli, A Z P, A P Z, eſſent eiuſdem ſpeciei (eſt enim hypot. Z P, in triangulo rectangulo, Z A P, quad. minor, cum anguli obliqui ſpecie concordant, & quad. maior, cum non concordant, per conuerſũ Reg. ſecundæ, ex Nu.8 prælud.) vel eius ſuppl. cum fuerint diuerſæ ſpeciei. Porrò ſpecies ipſius, Z P A (vel, Z B A, ſi eſſet propoſitum triangulum, Z B S) eadem eſt cum ſpecie anguli dati, S: & ideò angulo, A Z P, cum, S, ſpecie concordante, collectus arcus erit ipſe, Z P, & non concordante, erit, Z P, collecti arcus ſupplementum. Vide nunc totius calculi formam, in qua cum Meſ. 2: 1031867 colligitur arcus gr.25.39, nempè ipſummet crus, Z P, eſt gr.25. 39, ſcilicet quad. minus, cum anguli, A Z P, Z S A, ſint ambo acuti.

Per Regulam notandam Nu. 6 præludialis.

In fig. 26. *Per Logarithmos.*

Hyp. datæ, Z S,	gr. 64.59	*l* 2	962622	*m* 2	966900
Anguli, Z S A, *dati*	21.40	*m*	959907		
Anguli, S Z A, *ſubtr.*	80.28	*m* 2	922531	*t*	1078088
Reliquus, S Z P,	122.48				
Angulus, A Z P,	42.20			*l* 2	986879
Crus quæſitum, Z P,	25.39			*m* 2	1031867

Secundus modus aliter per Logar. procedens, ſupponens tamen datos angulos inſimul duobus rectis minores; quo vtraq; crura vno actu inueniuntur.

PRimò Tomolog. ſemiſummæ datorum angulorum iunge cum Logar. 2 ſemidifferentiæ eorundem, & cum Meſ. ſemibaſis: & fiet (dempto Binario &c.) Meſ. ſemiſummæ crurum.

Secundò Tomolog. 2 ſemiſummæ datorum angulorum iunge cum Log. eorundem ſemidifferentiæ, & cum Meſ. ſemibaſis: & fiet (dempto Binario &c.) Meſ. ſemidifferentiæ crurum.

Tertiò adde crurum ſemidifferentiam inuentam ipſi ſemiſummæ, & fiet crus maius; deme, & fiet crus minus.

Hæc Regula directè probatur ex Prop. Neperiana, ſuperius citata in Prob. 5, in ea enim oſtendi, quod vt Sinus 2 ſemiſummæ angulorum ad baſim dati trianguli obliquanguli, eſt ad Sin. 2 ſemidifferentiæ eorundem angulorum: ita Tangens ſemibaſis, eſt ad Tangentem ſemiſummæ crurum. Et quod vt Sinus ſemiſummæ eorundem angulorum, ad Sinum ſemidifferentiæ eorundem: ita Tangens ſemibaſis, eſt ad Tangentem ſemidifferentiæ crurum: quæ addita ſemiſummæ dat crus maius, & dempta, crus minus. Vnde, & hanc Regulam linearem, ſicuti & Logarithmicam, in Epilogo poſui, vt quouis horum modorum calculator pro libito vti poſſit. Vide nunc calculi formam per Log. procedentem, in qua crus maius inuentum eſt gr. 80. 17', & minus gr. 25. 39', vt ſupra quoq; ipſam adinuenimus.

In fig. 26.

Angulus, S Z P, datus	gr. 122.48'				
Angulus, Z S P, datus	21.40				
Summa	144.28				
Differentia	101. 8		*Per Logarithmos.*		
Semiſummæ	72.14	*t*	1051550	*t 2*	1002122
Semidifferentiæ	50.34	*l 2*	980290	*l*	988782
Semibaſis, Z S,	32.29 $\frac{1}{2}$	*m*	980405	*m*	980405
Semiſummæ crurum, Z P, P S,	52.58	*n*	1012245		
Semidifferentiæ eorumdem	27.19			*m*	971309
Crus maius, S P,	80.17				
Crus minus, Z P,	25.39				

Adde, & deme.

PROBLEMA OCTAVVM.

In triangulis ſphæricis obliquangulis, datis tribus lateribus, ſeu datis cruribus, & baſi, angulum verticalem inuenire.

VTILISSIMVM eſt hoc Problema, præcipuè ſi dentur in Terra duo loca, ſeu Ciuitates quarum vna habeat notam longitudinem, & latitudinem, altera verò tantum latitudinem, deturque earum diſtantia in circulo maximo per eas tranſeunte; per hoc enim alterius ignota longitudo manifeſtatur, vt patet in meæ Centuriæ Prob. 48. Similiter per ipſum Crepuſculi magnitudinem facile venari poſſumus, vt in eiuſdem Probl. 45 exemplificatum eſt. Euidentior tamen cernitur eius vtilitas in determinando temporis momento data altitudine Solis, vt in eadem Centuria Prob. 4 manifeſtò apparet: vel data altitudine alicuius Stellæ, quod in

Vſus huius Probl. inſignis.

Prob. eiuſdem 19 pariter exemplo illuſtraui. Hinc enim tempus Eclipſium Lunarium, vel ortus Cometarum, & apud Genethliacos natalitium tempus rectè ſtabilitur. In præſenti ergo tale, ac tantum Problema iuxta poſtremam rationem, hoc eſt data altitudine Spicæ Virginis pomeridiana ad Annum 1642, ac d.14 Aprilis gr.33.44'.15'', Polo gr.44.29'.30'', denuò hic elucidare conabor, quam hic ad initium Eclipſis Lunaris tunc effectæ obſeruauit Adm.R.P.Io. Baptiſta Ricciolius è Societate Ieſu Aſtronomiæ cultor eximius, qui præcæteris me ad huius Opuſculi impreſſionem hortatus eſt. Hic verò altitudinem Poli Bononienſis pluſquam tricies diuerſis ad hoc adhibitis organis affabrè elaboratis ſe pariter obſeruaſſe fatetur, ac ſemper inueniſſe gr.44.29'.30'' pauca tantum in ſecundis aliquando reperta differentia, qua idcirco, & ipſe in hoc calculo vſus ſum. Vt verò momentum temporis exquiſitius determinetur, & vt ſelectiorum, ac exquiſitiorum operationum aliquod hic habeatur exemplum, vtemur Canonis Radio 10000000, ſeu Radij Log. 100000000, calculoſq; vſq; ad ſecunda extendemus, qua ratione operandum erit, quotieſcunque exactiſſimam operationem exoptabimus.

Aſſumpto ergo iterum triangulo figuræ 25, in eo pariter intelligemus, P, eſſe polum boreum, Z, zenith, &, S, locum Spicæ inter medium Cœli, & occaſum conſtitutæ: vnde, Z S, comp. altitudinis Spicæ erit gr.56.15'.45'', Z P, cõp. eleuationis poli gr.45.30.30', &, P S, diſtantia eiuſdem Spicæ à Polo, Z, nempè aggregatum ex eiuſdem declinatione (quæ ad datum tempus reperitur gr.9.14'.56'' auſtralis) & ex gr.90, erit gr.99.14'.56'' (ſi verò declinatio eſſet borealis, S P, eſſet comp. eiuſdem declinationis) Ex datis ergo cruribus, P Z, P S, & baſi, Z S, inuenitur iuxta ſequentes modos angulus verticalis, Z P S, hoc eſt diſtantia Spicæ à Meridiano ferè gr. 18.24'.54''.

Primus, & ſecundus modus per Corollarium 4. Axiomatis 4 Sphæricorum, Lineariter, & Logarithmicè vſurpatum procedens.

PRimò fac vt Radius ad Secantem 2 cuiuſuis crurum, vt, P S (nempè ad Secantem exceſſus ſupra quad. hoc eſt graduũ 9.14'.36'', quia ſuperat quadrantem) ita Sec.2 reliqui cruris, P Z, ad Inuentum.

Secundò fac vt Radius ad Inuentum, ita differentiam Sinuum verſorum baſis, Z S, & differentiæ crurum, Z P, P S, ad Sinum verſum anguli verticalis, Z P S, quæſiti.

Recordare vnitatis prætermittendæ in additionibus Logarithmorum.

Eſt autem Sinus verſus baſis, Z S, 4446112: differentia crurum, Z P, P S, gr.53.44'.26'', eiuſq; Sinus verſus 4085575, qui demptus ex 4446112 relinquit differentiam dictorum Sinuum verſorum 360537. Vide ergo calculi formam tam per lineas, quam per Logarithmos, in qua vltimò habetur Sin. verſus 512069, ſeu Verſilogarithmus 87093286, dans angulum, Z P S, grad.18.24.54. Et nota differentiæ 360537 Log. haberi, quærendo ipſum inter Sinus, adhibita enim parte proportionali, inuenitur eius Logar. 85569498: hic idem verò per Chiliadem haberi poteſt, & facilius iuxta Prob. 3 Trig. planæ, ſi illi addantur tres ciphræ, vt ſit 360537000, Caracteriſtica namq; Logarithmorum Canonis poſtulat Si.Ta. & Sec. tribus notis longiores, vt Num. 27 præluid. Trig. planæ dictum eſt.

In fig.25.	*Per lineas*		*Per Logarith.*
Vt Radius	10000000	*r l*	0
Ad cruris, P S, gr.99.14'.56'' Sec. 2.	10131719	*t 2*	100056830
Ita cruris, P Z, gr.45.30.30 Sec. 2.	14018318	*t 2*	101466958
Ad Inuentum	14202966	*l*	101523788
Deinde.			
Vt Radius	10000000	*r l*	0
Ad Inuentum	14202966	*l*	101523788
Ita differ. Si. verſorum, Z S, & diff. Z P, P S,	360537	*l*	85569498
Ad anguli, Z P S, verticalis quæſiti gr.18.24'.54'' Si. verſum	512069	*u*	87093286

Tertius modus per triangula rectangula.

IN eodem triangulo fig. 25 demisso perpendiculo à, Z, communi termino laterum, S Z, Z P, singillatim quadrante minorum, quæsitumque angulum non ambientium, alioquin Vicarium solutioni sustituendum esset (quod an intra, vel extra triangulum, Z S P, cadat ostendet operatio) fient duo arcus, S A, A P (cum cadit intra) vel, S A, A B (cum cadit extra, vt si polus esset in, B, triangulumq; propositum esset, Z B S) qui vocantur casus perpendiculi, Z A. Insuper sciendum est, cadente intra perpendiculo, S P, aggregatum casuum, S A, A P, à Nepero vocari veram basim, & basim alternam, S B, differentiam casuum, S A, A P, supposito, A B, ipsi, A P, æquali: at cum perpendiculum cadit extra, vt accideret pro triangulo, Z B S, tunc veram basim vocat ipsam, B S, differentiam casuum, S A, A B, & basim alternam, S P, aggregatum casuum, S A, A B, seu S A, A P. Quoniam verò per Lemma 7 Cap. 5, P. 3 Directorij in triangulo sphærico obliquangulo, S Z P, si accipiantur, vt crura ipsa latera, S Z, Z P, cuius est basis vera, S P, est vt Tangens semibasis veræ, S P, ad Tang. semisummæ crurum, S Z, Z P; ita Tang semidifferentiæ eorundem crurum ad Tang. semibasis alternæ (quæ si sit maior semibasi vera, vt in hoc casu contingit perpendiculum cadit extra, sin minor, intra) ideò simul adiungemus hos tres Logarithmos, nempe Mes. 2 semibasis veræ hoc est dimidij ipsius, S P, gr. 49. 37'. 28'' (pro eiusdem Mes. qui esset subtrahendus, iuxta Tabellam Prob. 5 Trig. planæ) cum Mes. semisummæ crurum, S Z, Z P, quæ est gr. 50. 53'. 7'' $\frac{1}{2}$, & cum Mes. semidifferentiæ eorundem, quæ est gr. 5. 22'. 37'' $\frac{1}{2}$: fietque (dempto Binario &c.) Mesol. semibasis alternæ gr. 5. 37'. 18'', quæ cum sit minor semibasi vera, ostendit perpendiculum intra cadere. Adde ergo semibasim alternam gr. 5. 37'. 18'' cum semibasi vera gr. 49. 37'. 28'', fietq; casus maior, S A, gr. 55. 14'. 46''; deme, & fiet casus minor, A P, gr. 44. 0'. 10''. Tandem in triangulo rectangulo, Z A P, ex hyp. Z P, gr. 45. 30'. 30'', & crure, P A, gr. 44. 0'. 10'' per Reg. 5 Epilogi pro Rectangulis inueniemus angulum, P, cruri dato adiacentem iungendo Mes. ipsius, P A, cum Mes. 2 ipsius, Z P, fiet enim (dempta vnitate &c.) Log. 2 ipsius anguli, Z P A, quæsiti, qui erit ferè vt supra gr 18. 24. 53'', vt patet in sequenti calculi forma, quæ procedit tantum per Log. licet & lineariter idem possis inuenire. Cadente tamen extra perpendiculo quæsitus, Z B S, erit inuenti, Z B A, supplementum.

In fig. 25.			*Per Logarith.*
Semibasis veræ dimidij, S P,	gr. 49. 37'. 28''	*m* 2	99295881
Semisummæ crurum, S Z, Z P,	50. 53. 7 $\frac{1}{2}$	*m*	100898557
Semidifferentiæ eorundem	5. 22. 37 $\frac{1}{2}$	*m*	89737013
Semibasis alternæ, S B,	5. 37. 18	*m*	89931451
Casus maior, S A, summa, S B, S P,	55. 14. 46		
Casus minoris, A P, diff. S B, S P,	44. 0. 10	*m*	99848793
Cruris, Z P,	45. 30. 30	*m* 2	99922933
Anguli quæsiti, Z P S,	18. 24. 53	*l* 2	99771726

Quartus modus aliter per Logarithmos procedens, qui tamen postulat vtraq; crura singillatim quadrante minora.

ITerum assumantur in fig. 26, Z P, P S, tanquam crura, quorum cum, P S, sit quadrante maius, ideò Vicarium, Z P C, fig. 26 solutioni substituemus, in quo crus, P C, erit gr. 80 45′. 4″, crus, P Z, gr. 45. 30′. 30″, & basis, Z C, comp. ipsius, Z S, erit gr. 123. 44′. 15′; inuestigetur autem angulus verticalis, Z P C, cuius suppl. Z P S, erit angulus quæsitus.

Primò ergo Tomolog. differentię crurum iunge cum Log. 2 basis, & fiet Log. 2 arcus dimidiandi, dempta tamen Vnitate vltimo loco ad sinistram.

Secundò conijce in vnam summam duos Log. arcus dimidiati (vel duos eiusdem Log. 2 cum basis est quadrante maior) cum Tomolog. 2 vniuscuiusque crurum, & cum Log. 2 differentię eorundem, & fiet summa (relicta vltimo loco ad sinistram tantum Vnitate) cuius dimidium erit Logarithmus semianguli verticalis, ex quo ipsum integrum obtinebis.

Hæc Regula pariter pendet ex Prob. 36 meæ Centuriæ, vt Regula 4 modi Probl. 4, ac 6. Vide sequentem eius calculi formam, in qua secunda Logarithmorum summa (relicta vltimo loco ad sinistram tantum Vnitate) est 199887355, quæ signatur duplici, ll, vt agnoscatur dimidiandam esse, ad habendum Log. 99943677, cui respondet semiangulus, Z P C, grad. 80. 37′. 32″ $\frac{1}{2}$, vnde integer angulus, Z P C, qui scribitur è regione duplicis, ll, est gr. 161. 35′. 5″, quapropter eius suppl. Z P S, angulus verticalis quæsitus est grad. 18. 24′. 55″.

In fig. 26.			*Per Logarith.*
Differentiæ crurum, Z P, P C,	gr. 35. 14′. 34″	*t*	100879299
Basis, Z C,	123. 44. 15	*l* 2	97445973
Arcus dimidiandus	47. 9. 15	*l* 2	98325272
Arcus dimidium	23. 34. 37 $\frac{1}{2}$	*l* 2	99621433
Idem Log. 2		*l* 2	99621433
Crus maius, P C,	80. 45. 4	*t* 2	100056830
Crus minus, P Z,	45. 30. 30	*t* 2	101466958
Differentiæ crurum, Z P, P C,	35. 14. 34	*l* 2	99120701
Angulus verticalis, Z P C,	161. 35. 5	*ll*	199887355
Semianguli verticalis, Z P C,	80. 47. 32 $\frac{1}{2}$	*l*	99943677

Quintus modus pariter per Log. procedens, & nulli casuum obseruationi alligatus.

IVnge Tomolog. 2 crurum cum Log. semisummæ, & cum Log. semidifferentiæ basis, & differentiæ eorundem crurum, & (relicta vltimo loco ad sinistram tantum Vnitate) fiet Logar. cuius dimidium erit Logar. semianguli verticalis, ex quo integrum angulum verticalem obtinebis.

Vel, si mauis, iunge Tomolog. 2 crurum cum Log. semisummæ, & cum Log. semidifferentiæ basis, & aggregati eorundem crurum, & (relicta vltimo loco ad sinistram tantum Vnitate) fiet Log. cuius dimidium erit Log. 2 semianguli verticalis &c.

Hæ duæ Regulæ sunt quoq; in Compendio, necnon in Directorio P. 3, Cap. 7, pag. 308, vbi pariter demonstrantur, ac exemplificantur. Vide nunc calculi formas, iuxta vtrasq; Regulas circa triangulum, Z P S.

In fig. 25.			*Per Logarith.*
Cruris, P S,	gr. 99.14.56″	t 2	100956830
Cruris, P Z,	45.30.30	t 2	101466958
Differentia crurum, P S, P Z,	53.44.26		
Basis, Z S,	56.15.45		
Summa	110. 0.11		
Differentia	2.31.19		
Semisummæ	55. 0. 5 $\frac{1}{2}$	*l*	99133726
Semidifferentiæ	1.15.39 $\frac{1}{2}$	*l*	83425392
Angulus verticalis, Z P S, quæsitus	18.24.54	*ll*	184082906
Semianguli, Z P S,	9.12.27	*l*	92041453

Vel.			*Per Logarith.*
Cruris, P S,	gr. 99.14.56	t 2	100056830
Cruris, P Z,	45.30.30	t 2	101466958
Aggregatum crurum, P S, P Z,	144.45.26		
Basis, Z S,	56.15.45		
Summa	201. 1.11		
Differentia	88 29.41		
Semisummæ	100.30.35 $\frac{1}{2}$	*l*	99926523
Semidifferentiæ	44.14.50 $\frac{1}{2}$	*l*	98437045
Angulus verticalis, Z P S, quæsitus.	18.24.55	*ll* 2	199887356
Semianguli, Z P S,	9.12.27 $\frac{1}{2}$	*l* 2	99943678

Inuento igitur angulo verticali, Z P S, gr. 18.24′. 54″, qui est distantia Spicę, S, à Meridiano, huic coniungenda est cum eiusdem stellæ ascensione recta, quæ ad dictum tempus reperitur gr. 196. 37′. 54″ (& hoc quia est in parte occidentali, at si esset in orientali talis distantia ex eadem ascensione recta esset subtrahenda) fietq; ascensio recta medij Cœli gr. 215. 2′. 48′; à qua si dematur Solis ascensio recta gr. 23. 20′. 17″ (eius enim locus circa tempus obseruationis fuit circiter in gr. 25. 12′ Arietis,) additis illi gr. 360, quando subtrahi non potest, remanebunt gr. 191. 42′. 31, qui si in tempus conuertantur (computando pro singulis gr. 15 vnam horam, & pro vno gradu quatuor horæ minuta) fient horæ post meridiem 12. 46′. 50″ tempore prædictæ obseruationis.

Nota autem stellarum fixarum 100, quæ meæ Praxi Astrologicæ additæ sunt declinationem, & ascensionem rectam ad 200 Annos, nempè 100 ante Radicem 1600, & 100 potest, facilè per partem proportionalem incrementi, vel decrementi eorundem haberi posse, vt in eadem Praxi Cap. 10 explicatur. Vel pro omnibus per Tychonis Tabulam positam Tomo primo Progym. & exquisitius per Cap. 3 dictæ Praxis Astrologicæ sumpta eiusdem longitudine, & latitudine ex Catalogo eiusdem Tychonis. Porrò in superioribus calculis animaduertere potes, quando graduum, min. & sec. sumendus est Si. 2 vel Logar. 2, Ta. 2 vel Mes. 2 Sec. 2, vel Tom. 2, quod facilius est seorsim scribere ipsorum graduum, min. & sec. comp. eiusque sumere Sin. vel Log. vel Mes. &c. vt in fine Prob. prim Trig. planæ dicebatur. Sicut è contra pro arcu ex. gr. Log 2, melius erit extrahere arcum proprium ipsius Logar. eiusq; capere comp. & sic in cæteris quibuscunque, vt in fine Prob. 2 eiusdem Trig. planæ pariter innuebatur. Posses quoque in calculis, qui fiunt ad gr. min. & sec. cum gr. & min sumere respondentem Sinum, vel Logar. aut Mes. &c. scribendo seorsim sequentem differentiam, eiusq; partem proportionalem super scribere addēdis in vnam summam, facilius enim videtur vno actu omnia in vnam summam colligere; quod tamen pro tui libito exequeris.

PROBLEMA NONVM.

In triangulis sphæricis obliquangulis, datis tribus angulis, seu angulo verticali, & duobus basi adiacentibus: ipsam basim inuenire.

HVIVS Problematis solutio pendet ex hac veritate: quod nempè in omni triangulo sphærico mutari possunt latera in angulos, & anguli in latera; assumpto tamen prius pro vnico quouis angulo, & suo subtendente latere suis supplementis. Vt ex.gr. est triangulum sphæricum, G I H, fig. 3, quod supponamus obliquangulum, cuius angulus, G, est gr 46, H, gr.114, &, I, gr. 24: sumpto autem pro quocunq; angulo, vt pro, G, eius suppl. gr. 134, dico hos angulos gr.134, gr.114, &, gr. 24, mutari posse in latera, vt fiat ex illis ex. gr. triangulum sphæricum, K L M, fig.4, in quo, L M, sit gr.134, respondens suppl. anguli, G, &, K M, gr.114 respondens angulo, H, ac, K L, gr.24 respondens angulo, I. Erit autem vicissim angulus, K, suppl. lateris, I H, angulus, L, æqualis lateri, G I, & angulus, M, æqualis lateri, G H. Quod ego ostendi in Directorio P 3, Cap.1. ad def.13, vbi hæc triangula dixi reciproca vocari. Idē probat Maginus in Primo Mobili lib.primo Cap.6, Pitiscius, & alij &c. Si ergo in triangulo sphærico quocunq; dentur anguli, eorum duo quicunque, ac tertij suppl. commutabuntur in latera; deinde ex datis facti trianguli lateribus inuenientur anguli per Probl. antec. hoc est latera trianguli prioris quæsita. Vt si in triangulo, G I H, datorum angulorum quæratur latus, G H, in eius triangulo reciproco, K L M, ex datis lateribus, quæremus angulum, M, qui erit latus quæsitum, G H. Ita angulus, L, daret, G I, &, K, suppl. ipsius, I H. Verum ne circa hanc commutationem angulorum in latera calculatori, sit laborandum, sequentes Regulas, quæ sunt inuersæ earum, quæ traditæ sunt in Prob. ant. concinnaui, quibus sine respectu ad triangulum reciprocum (quo mediante tamen effectæ sunt) poterit operari.

Supponamus nunc ergo in fig.26, Z, S, P, esse vertices trium locorum in Terra, quorum dentur anguli positionum, vt, Z P S, gr.60.12', P Z S, gr.109.6, &, Z S P, gr. 32. 16', quæratur autem latus quodcunque, vt, Z S (quod assumetur, vt basis) correspondens distantiæ duorum locorum, Z, S, hanc ergo per sequentes modos inueniemus esse gr.64.6'.

Primus, & secundus modus per Cor. 5 Axiomatis 4 Sphæricorum, lineariter, & Logarithmicè vsurpatum procedens.

PRimò fac vt Radius ad angulorum basi, Z S, adiacentium cuiusuis, vt, P Z S, gr.109.6' Sec.2, hoc est ad comp. P Z S, gr. 19.6' (excessus supra quad.) Secantem; ita anguli reliqui adiacentis, Z S P, gr. 32. 16' Sec.2 ad Inuentum.

Secundò fac vt Radius ad Inuentum, ita Sinuum versorum (quorum vnus est anguli, Z P S, verticalis, alter verò differentiæ inter, Z S P, & suppl. anguli, S Z P, basi, Z S, adiacentium) differentiam ad Sinum versum basis, Z S, quæsitæ.

Est autem anguli, Z P S, gr.60.12' Si. versus 50303. Cum verò angulus, Z S P, sit gr. 32. 16', &, S Z P, gr.109.6', huius suppl. erit gr.70.54, à quo dempto, Z S P, gr.32. 16', remanebit differentia gr.38. 38', cuius Si. versus est 21884, qui subtractus ex superiori 50303 relinquit positam in sequenti calculo differentiam 28419. Huius autem Logarithmum habebis vel Canonem, vel per Chiliadem, vt Prob. ant. ad primum, & secundum modum dicebatur, habita ratione Caracteristicæ. Ac tandem cum Sinu verso 56334, vel cum Versilog. 975077 inuenies per Probl. 2 Trig. planæ respondentem arcum basim, Z S, gr.64.6'. Vide nunc calculi formam, in cuius duabus Logarithmorum additionibus recordare Vnitatis delendæ &c.

In fig. 26.			*Per Logarith.*
Vt Radius	100000	*r l*	0
Ad anguli, S Z P, Sec. 2, hoc est ad gr. 19. 6' Sec.	105826	*t*	1002459
Ita anguli, Z S P, gr. 32. 16' Sec. 2.	187315	*t 2*	1027257
Ad Inuentum	198228	*l*	1029716
Deinde.			
Vt Radius	100000	*r l*	0
Ad Inuentum	198228	*l*	1029716
Ita Si. uersorum &c. differentia	28419	*l*	945361
Ad basis, Z S, gr 64. 6' Si. versum	56334	*u*	975077

Poterant quidem hic superaddi duo alij modi reciprocè respondentes tertio, & quarto modo Probl. ant. sed breuitatis causa hic prætermittuntur, præsertim cum sint conditionibus alligati, necnon quia calculator poterit per eosdem hoc quoque Problema soluere, si voluerit, mediante triangulo reciproco, vt supra dictum est. Tertius ergo modus erit, qui subsequitur, quiq; nulli casuum subiacet obseruationi.

Tertius modus per Logarithmos procedens, ac ab omni casuum obseruatione absolutus, qui est reciprocus quinto modo Prob. ant.

PRimò Tomolog. 2 angulorum basi adiacentium iunge simul cum Log. semisummæ, & cum Log. semidifferentiæ supplementi anguli verticalis, & differentiæ eorundem angulorum ad basim, fietq; (relicta vltimo loco ad sinistram tantum Vnitate) summa, cuius dimidium erit Log. 2 semibasis quæsitæ, ex quo integram basim obtinebis.

Vel, si mauis, Tomolog. 2 angulorum basi adiacentium iunge simul cum Logar. semisummæ, & cum Logar. semidifferentiæ supplementi anguli verticalis, & aggregati eorundem angulorum ad basim, fietq; (relicta vltimo loco ad sinistram tantum Vnitate) summa, cuius dimidium erit Log. semibasis quæsitæ &c.

Vide nunc calculorum formas similes ijs, qui Prob. ant. quinto modo adiecti sunt, præbentes eandem basim, Z S, vt supra gr. 64. 6'. Aduerte autem cum debes sumere Logar. semisummæ gr. 98. 19', quod sumendus est Log. suppl. eorumdem, hoc est grad. 81. 41', vel potes etiam, & est facilius sumere Log. 2 eius excessus supra gr. 90, nempè Logar. 2 graduum 8. 19. Similiter pro Log. semisummæ gr. 130. 35' vel sumes Logar. suppl. hoc est graduum 49. 25, vel Log. 2 comp. hoc est excessus supra gr. 90, nempè graduum 40. 35', vt monui Probl. primo, Trigon. planæ. Summæ verò Logarithmorum notatæ duplici, ll, vel. ll 2, docent eam summam esse dimidiandam, vt in Prob. ant.

Iuxta monitum Probl. 1 Trigon planæ pro gradibus supra 90, & infra 180.

In fig. 26.			*Per Logarith.*
Anguli, P Z S,	gr. 109. 6'	*t 2*	1002459
Anguli, Z S P,	32. 16	*t 2*	1027257
Differentia angulorum, Z, S,	76. 50		
Suppl. anguli verticalis, Z P S,	119. 48		
Summa	196. 38		
Differentia	42. 58		
Semisumma	98. 19	*l*	999541
Semidifferentia	21. 29	*l*	956375
Basis, Z S,	64. 6	*ll 2*	1985632
Semibasis, Z S,	32. 3	*l 2*	992816

1

Vel.

Anguli, P Z S,	gr. 109. 6′	*t 2*	1002459
Anguli, Z S P,	32.16	*t 2*	1027257
Aggregatum angulorum, Z, S,	141.22		
Suppl. anguli verticalis, Z P S,	119.48		
Summa	261.10		
Differentia	21.34		
Semisummæ	130.35	*l*	988051
Semidifferentiæ	10.47	*l*	927206
Basis, Z S,	64. 6	*ll*	1944973
Semibasis, z s,	32. 3	*l*	972486

PROBLEMA DECIMVM.

Rationem reddere illius modi inueniendi ad datam Poli eleuationem Circulum positionis Significatoris extra angulos Figuræ cælestis constituti; quem attuli in Appendice Praxis Astrologicæ pro Directionibus conficiendis

Cap. 4.

ANTEQVAM Trigonometrię sphęricæ finem imponam huiusce rei, Astrologiæ professoribus fortè nõ iniucundæ, hic demonstrationem adiungere decreui, quam apud neminem adhuc vidi, vt pluribus satisfacerem, qui eandem se exoptare mihi significarunt. At qui Astrologica negligit, vel à demonstrationum spinosis difficultatibus abhorret, hanc vt non necessariam relinquere poterit.

Lemma.

IN quocunque triangulo sphærico, vt, Z P S, vel, Z B S, fig. 25, cuius assumpta cruta, Z S, Z P, vel, Z S, Z B, sint singillatim quadrante minora: siue perpendiculum à, Z, vertice ad basim, S P, ductum, vt, Z A, cadat intra triangulum, vt contingit pro, Z P S, vel extra, vt pro, Z B S. Est vt Sinus aggregati complementorum crurum ad Sinum eorundem differentiæ: ita Tangens 2 semianguli verticalis, S Z P, ad Tangentem semidifferentiæ angulorum, S Z A, A Z P, ipsi perpendiculo Z A, adiacentium, & hoc in triangulo, S Z P. At in, S Z B, ita Tangens 2 semianguli verticalis, S Z B, ad Tangentem semisummę angulorum, S Z A, A Z B, eidem perpendiculo adiacentium.

Examinetur primò veritas in triangulo, Z P S. Cum ergo ex Lemmate 4, Cap. 5, P. 3 Directorij (quod positum est pariter in Compendio pag. 85) Tangentes 2 crurum, S Z, Z P, Sinibus 2 angulorum, S Z A, A Z P, directè sint proportionales: si fiat triangulum rectilineum, vt ex. gr. in fig. 27, I H K, in quo angulus, I, sit comp. anguli, S Z A, &, K, comp. anguli, A Z P: erit vt Tangens 2, S Z, ad Tang. 2, Z P, ita Sin. 2 anguli, S Z A, hoc est Sinus anguli, I; ad Si. 2 anguli, A Z P, hoc est ad Sinum anguli, K. Cum verò Tangentes 2 crurum, S Z, Z P, sint vt Sinus angulorum, I, K: erit aggregatum Tangentium 2, nempè Tangentium complementorum crurum, S Z, Z P, ad earundem differentiam; vt aggregatum Sinuum angulorum, I, K, ad eorum differentiam. At vt aggregatum Tangentium complementorum crurum, S Z, Z P, ad eatum differentiam: ita est Sinus aggregati complementorum eorundem crurum, S Z, Z P,

Nã si ex. gr. est 5 ad 7, vt 20 ad 28; etiam aggregatum ex 5, 7, nempè 12 est ad eorum differentiam 2, vt aggre-

gatum ex 20, *& 28, nempè 48 ad eorum differentiam 8.*

ad Sinum eorum differentiæ, per Lem. 3 demõstratum in meo Compendio pag. 101. Et vt aggregatum Sinuum angulorum, I, K, ad eorum differentiam, ita aggregatum laterum, I H, H K, ad eorum differentiam (sunt enim latera, I H, H K, Sinibus angulorum, I, K, directè proportionalia per Axioma 2 Planorum). & vt aggregatum laterum, I H, H K, ad eorum differentiam, ita est Tangens semisummæ angulorum, I, K, ad Tangentem anguli infra, vel supra dimidium per Axioma 3 Planorum. Ergo vt Sinus aggregati complementorum crurum, S Z, Z P, ad Sinum eorundem differentiæ, ita Tangens semisummæ angulorum, I, K, ad Tangentem eorundem semidifferentiæ, hoc est ita Tangens semisummæ complem. angulorum, S Z A, A Z P (eorum enim complementis positi sunt æquales anguli, I, K) ideſt ita Tangens compl. seu secundæ semianguli verticalis, S Z P, ad Tangentem semidifferentiæ complementorum angulorum, S Z A, A Z P. Quoniam verò differentia duorum arcuum, vel angulorum quadrante minorum eadem est differentiæ cõplementorum eorundem (vt si eorum vnus sit gr. 70, & alter gr. 80, quorum differentia est gr. 10, eadem est inter gr. 20, & gr. 10 prædictorum complementa) ideò semidifferentia complementorũ angulorum, S Z A, A Z P, vel, si mauis dicere, differentia semicomplementorum eorundem, æquabitur differentiæ semiangulorum, S Z A, A Z P, vel, quod idem est, æquabitur semidifferentiæ angulorum, S Z A, A Z P. Ergo in triangulo, S Z P, Sinus aggregati complementorum crurum, S Z, Z P, ad Sinum eorundem differentiæ, erit vt Tangens secundæ semianguli verticalis, S Z P, ad Tangentem semidifferentiæ angulorũ, S Z A, A Z P. Patet ergo Lemmatis veritas in triangulo, S Z P.

Sit nunc eadem veritas examinanda circa triangulum, Z B S, extra quod cadit, Z A, perpendiculum: in gratiam verò demonstrationis supponatur, A P, æqualis ipsi, A B, ducto enim maximi circuli arcu, Z P, ille æquabitur ipsi, Z B, vt & angulus, B A Z, ipsi, A Z P, hoc enim ostendetur ad modum prop. quartæ Primi Elementorum, quæ in sphæricis quoq; verificatur, vt ostendit Clauius de Triangulis sphæricis prop. 7. Ergo cum ostensum fuerit quod vt Sinus aggregati complementorum crurum, S Z, Z P, ad Sinum eorum differentiæ, ita Tangens 2 anguli, S Z P, verticalis est ad Tangentem semidifferentiæ angulorum, S Z A, A Z P, & cum, P Z, sit æqualis idsi, Z B, & angulus, P Z A, ipsi, A Z B: erit quoq; vt Sinus aggregati complementorum crurum, S Z, Z B, ad Sinum eorundem differentiæ, ita Tangens 2 semianguli verticalis, S Z P, ad Tangentem semidifferentię angulorum, S Z A, B Z A. Est autem eorum differentia ipse angulus verticalis, S Z B, in triangulo, S Z B: ergo vt Sinus aggregati complementorum crurum, S Z, Z B, ad Sinum eorundem differentiæ, ita Tangens 2 semianguli, S Z P, ad Tangentem semianguli, S Z B. At quia Tangentes duorum arcuum, vel angulorum Tangentibus 2 eorundem sunt reciprocè proportionales; vt ostendi in Direc. P. 1, Cap. 7, & vt probat Maginus in Primo Mobili Lib. 1 Cap. 3, Analogia 5, ideò vt Tangens 2, seu complementi semianguli, S Z P, ad Tangentem semianguli, S Z B, ita reciprocè erit Tangens 2, seu comp. semianguli, S Z B, ad Tang. 2 complementi, hoc est ad Tangentem ipsius semianguli, S Z P. Ergo vt Sinus aggregati complementorum crurum, S Z, Z B, ad Sinum differentiæ eorundem, ita Tangens 2 semianguli verticalis, S Z B, erit ad Tang. semianguli, S Z P, nempè ad Tangentem semisummæ angulorum, S Z A, A Z P, seu, S Z A, B Z A. Vnde in triangulo quoque, S Z B, manifestum est, quod propositum erat.

Corollarium.

HInc in triangulo sphærico quocunq; cuius crura sint singillatim quadrante minora, datis ijsdem cruribus, & angulo verticali, ductoque à vertice super basim perpendiculo, vtriq; anguli prædicti perpendiculo adiacentes notificabuntur. In triangulo enim, vt, S Z P, eiusdem fig. 25, in quo perpendiculum cadit intra, faciemus vt Sinus aggregati complementorum datorum crurum, S Z, Z P, ad Sinum eorundem differentiæ, ita Tangentem secundam semisummæ angulorum, S Z A, A Z P, hoc est Tang. 2 semianguli verticalis, ad Tangentem semidifferentiæ eorundem, quæ addita dictæ semisummæ, seu semiangulo verticali, S Z P, faciet angulum maiorem, & demptà, angulum minorem. At cum perpendiculum cadet extra, vt cum triangulum erit quale, S Z B: faciemus, vt Sinus aggregati complementorum crurum, S Z, Z B, ad Sinum eorundem differentiæ, ita Tangentem secundum semidifferentiæ angulorum, S Z A, B Z A, hoc est semianguli verticalis, S Z B, ad Tangentem semisummæ eorundem angulorum, cui addita semidifferentia, seu semiangulo verticali, S Z B, fiet angulus maior; & dempta, fiet angulus minor.

Applicatio prædictorum Circuli positionis inuentioni.

SIt in fig. 28 Meridianus, A B C D, & in eo polus septemtrionalis, E, & meridionalis, L. Similiter sit in hæmisphærio orientali (in quo semper erit Significator, vel Significatoris oppositum, quæ sunt semper in eodem circulo positionis, pro Significatore enim posito in parte occidentali eius oppositio vtemur) medietas Æquatoris, A N C, Horizontis obliqui cuiuscunque, B N D. Dentur autem duo Significatores (vel Significatorum oppositi) H, S, habentes declinationem septemtrionalem, ac minorem ipso, D C, complemento eleuationis poli, tales enim dirigi solent, quorum, H, sit supra Terram, &, S, infra. Per, H, S, verò, &, B, D, communes sectiones Meridiani, & Horizontis transeant semicirculi positionum, B H D, B S D, secantes Æquatorem in punctis, G, K. Et sint ducti maximorum circulorum per polos, E, L, & per, G, K, H, S, transeuntium quadrantes, E G, E K, E H F, E S M. Erunt igitur iuxta doctrinam sphæricam, H F, S M, Significatorum, H, S, seu oppositorum &c. declinationes, ipso, D C, minores. Ducatur nunc ab, E, super semicirculum positionis, B H D, perpendicularis arcus, E O, qui erit quadrante minor, cum angulus, E D O, cui opponitur, sit acutus, est enim minor recto, E D N, & cum debeant specie concordare iuxta Reg. primam Num. 8. Insuper cadet intra triangulum, H E D, per Num. 6, est enim quoque acutus, E H D, etenim cum, E H, supponatur minor, C D, &, E F, E C, sint æquales, quippe qui sunt maximorum circulorum quadrantes, erit, E H, maior, E D, ergo angulus illi oppositus, E D H, erit maior, E H D, sed, E D H, est acutus, ergo &, E H D, erit acutus, & ideò perpendiculum, E O, cadet intra triangulum, H E D. Si ergo detur Significatoris, H, vel oppositi &c. longitudo, & latitudo, habebitur eius declinatio, & ascensio recta, promptius quidem per Tabulas, & paulò difficilius, sed vniuersalius per meæ Praxis Astrologicæ Cap. 3: à cuius ascensione recta dempta ascensione recta Medij Cœli, quæ datur ex gradu noto ipsius Medij Cœli in fig. cælesti, remanebit notus arcus Æquatoris, A F, vel illi analogus angulus, A E F, qui est distantia Significatoris, vel oppositi &c. H, à Medio Cœli, & subinde notū erit eius suppl. F E C, vel, H E D, angulus verticalis trianguli, H E D. Similiter nota eleuatione poli, E D, fit notum eius compl. D C, & est nota declinatio, H F, ergo erunt nota complementa, crurum, H E, E D. Si ergo simul addantur, minusq; ex maiori detrahatur, fiatq; vt Sinus aggregati ipsorum, D C, comp. eleuationis poli, &, H F, declinationis, ad Sinum eorundem differentię; ita Tangens 2, seu comp. semianguli verticalis, H E D, hoc est ita Tangens semidistantiæ, A E F, à Medio Cœli ad quartum, exibit per superius ostensa, Tangens semidifferentiæ angulorum, H E O, O E D, quia perpendiculum, O E, cadit intra. Est autem semidifferentia angulorum, H E O, O E D, æqualis semidifferentiæ eorundem complemētorum, vt in Lemmate probabatur, quod seruat. Insuper quia in triangulo rectangulo, G E O, hypotenusa, G E, est quadrans, alter angulorum eidem adiacentium erit rectus per Reg. 3 Num. 8. at, E G O, est acutus, quia specie cum, E O, perpendiculo concordat, quod est quad. minus, cum opponatur acuto, E D O: ergo, G E O, erit rectus, vnde, G E H, seu, G E F, erit comp. ipsius, H E O, &, A E G, ipsius, O E D. Habemus ergo notam semisummam duorum angulorum, A E G, G E F, & eorum semidifferentiam. Et quoniam, A E G, maior est, G E F, quia per Lem. 4 P. 3 Direc. Tangentes secundæ crurum, D E, E H, Sinibus secundis angulorum, D E O, O E H, directè sunt proportionales. Hoc est Tangens, D C, ad Tang. H F, est vt Sinus comp D E O, ad Sinum comp. O E H, nempè vt Sinus anguli, A E G, ad Sinum anguli, G E F, & est Tangens, D C, maior Tang. H F, quia, D C, ponitur maior, H F, ergo, A E G, erit maior, G E F, quia vtriq; sunt acuti. Inuenta ergo semidifferentia angulorum, A E G, G E F, addita eorum semisummæ, hoc est semidistantiæ, A E F, faciet angulum maiorem, A E G, hoc est arcum, A G, qui est arcus positionis ipsius, H. Ergo cum Significator, vel Significatoris oppositum constitutum in parte orientali habet declinationem septemtrionalem supra Terram, minorem complemento eleuationis poli, si fiat vt Sinus aggregati ex declinatione, & comp. eleuationis poli, ad Sinum eorundem differentiæ, ita Tangens eiusdem semidistantiæ à Medio Cœli ad quartum: Vel per Logar. si simul addemus hos tres Logarithmos, nempè Tomolog. 2 aggregati (pro Logar. qui esset subtrahendus) ex declinatione Significatoris, seu oppositi &c. & comp. eleuationis poli, cum Log. eorundem semidifferentiæ, & cum Mes. semidistantiæ à Medio Cœli, fiet (dempto Binario &c.) Mesol. arcus, superius verò fiet Tangens eiusdem arcus

Vt in planis.

Aduerte tamen in Appendice pro Tom. 2 nos vti Ref Log. & in summa demere tantum Vnitatē.

(quem voco arcum adiunctiuum, quia semper addendus est semidistantiæ à Medio Cœli, cum declinatio minor est complemento eleuationis poli, vt fiat arcus positionis Significatoris, vel oppositi &c.) addendi semidistantiæ, & veniet arcus positionis dicti Significatoris, vel oppositi &c. Hæc autem est prior operatio, quæ per Logar. exercetur in præfato modo, vt in inferiori calculi forma manifestum est.

Pro Significatore verò, seu Significatoris opposito, S, habente declinationem septemtrionalem infra Terram, quæ idcirco necessariò minor est ipso, D C, ducto perpendiculo ab, E, super semicirculum positionis, B K D, illud cadet extra triangulum, E S D, etenim, E D S, est obtusus, &, E S D, est acutus: continuato enim arcu, B K D, versus, D, angulus exterior, E D T, est acutus, cum sit æqualis ipsi, K D C, supplemento obtusi, A D K, estq; maior ipso, E S D, nam, S E, E D, simul sunt semicirculo minores, ergo &, E S D, est acutus: perpendiculum ergo cadet extra, E S D, cum verò possit cadere ab, E, & ad partes, S, & ad partes, D, ipsum sumemus ad partes, D, quale sit, E T, oppositum acuto, E D T, & ideò quadrante minus. Si ergo fiat vt Sinus aggregati ex compl. crurum, E D, E S, hoc est aggregati ex, C D, comp. eleuationis poli, & ex, M S, declinatione ipsius, S, ad Sinum eorum differentiæ, ita Tang. 2, seu comp. semianguli, S E D, nempè ita Tangens semidistantiæ, A E M, ipsius, S, à Medio Cœli, ad quartum, exibit Tangens semisummæ angulorum, S E T, D E T, quia perpendiculum, E T, cadit extra. Quoniam verò si addatur semidifferentia angulorum, S E T, D E T (quę est etiam semidifferentia complementorum eorundem angulorum, vt in Lemmate probabatur, quilibet enim duo arcus singillatim quadrãte minores habent communem differentiam cum suis complementis) idest semidifferentia complementorum eorundem angulorum, S E T, D E T, quæ est semiangulus, S E D, semisummæ eorundem complementorum fit complementum maius, hoc est compl. anguli minoris, D E T, nempè fit angulus, K E D (cum enim, E K, hypotenusa in triangulo rectangulo, E K T, sit quadrans, alter angulorum illi adiacentium, nempè, K E T, rectus erit, reliquus enim, E K T, est acutus, eiusdem nempè speciei cum perpendiculo, E T) idest fit, K C, arcus positionis ab Imo Cœli. Ideò si addatur comp. illius semidifferentiæ, seu semianguli, S E D, nempè semidistantia, A E M, semisummæ angulorum, S E T, D E T, fiet arcus positionis, A K, à Medio Cœli. Nam si arcus, vt gr. 20 additus arcui, vt gr. 30, facit arcum gr. 50: comp. arcus, nempè gr. 70 additum comp. arcus, nempè gr. 60, dat suppl. prius facti arcus, nempè gr. 130. Ergo si fiat vt Si. aggregati ex, C D, S M, ad Sin. eorum differentiæ, ita Tangens semidistantiæ, A E M, ad quartum, emerget Tangens arcus adiunctiui semidistantiæ, vt componatur arcus positionis, A K, ipsius, S, à Medio Cœli. Vel si iunxeris Tomolog. secundum aggregati ex, D C, S M, cum Logar. eorundem differentiæ, & cum Mes. semidistantiæ, A E M, fiet (dempto Binario &c.) Mesol. arcus adiunctiui semidistantiæ, vt componatur arcus positionis, A K, à Medio Cœli, qualiter procedit prior calculi operatio.

Regiom. lib. 3, prop. 47.

Per Corollarium Lemmatis.

Per Reg. 3 Num. 8 præludialis.

Non dissimili ratione fiet demonstratio in hæmisphærio australi, A B C, siue Significator, aut Significatoris oppositum, habeat declinationem meridionalem infra Terram, pro qua vtemur ex. gr. triangulo, B L P, in quo cadit intra perpendiculum, L R: siue supra Terram, pro qua vtemur triangulo simili ipsi, E S D, in quo perpendiculum cadet extra: ostendemusq; colligi ex priori calculi operatione arcum positionis ab Imo Cœli, à quo semidistantia intelligitur in declinatione australi computari.

Remanet casus quando declinatio superat comp. eleuationis poli, vt si, F H, supponatur maior, D C, & tunc, veluti cum declinatio superabatur ab eodem comp. superius ostensum est arcum positionis, A G, ipso, G F, maiorem esse, ita hic è contra ostendemus, A G, ipso, G F, minorem esse, & ideò arcum inuentum non esse in hoc casu adiunctiuum, sed subtractiuum à semidistantia, vt prodeat arcus positionis, qui erit à Medio Cœli in declinatione septemtrionali supra Terram, & ab Imo Cœli, in declinatione meridiana sub Terra. Non poterit autem Significator, vel Significatoris oppositum habere declinationem septemtrionalem infra Terram, vel meridianam supra Terrem, tunc enim eius declinatio compl. eleuationis poli minor esset, quod esset cõtra hypotesim. Similiter aduerte si declinatio, vt, H F, æquaretur ipsi, D C, quod tunc eadem ratione probaretur, A G, æquari ipsi, G F, & in tali casu semidistantia, seu dimidium, A F, esset arcus positionis, A G, quæsitus.

Quod si Sig. vel Sig. oppositum esset in, I, cadente perpendiculo, O E, extra triangulum, O I D, ad partes, I, ostenderemus vt supra angulum, G E O, esse rectum, & subinde, G E I, vel, G E M, seu arcum, G M, esse quadrante maiorem, &, A G, quadrante minorem, & ideò inuentum arcum similiter à semidistantia, A M, subtrahendum esse, vt habeatur arcus positionis, A G, à Medio Cœli in declinatione septemtrionali supra Terram, vel ab Imo Cœli in meridionali sub Terra.

Habito arcu positionis, vt, A G, in triangulo rectangulo, A B G, ex datis cruribus, B A, comp. eleuationis poli, &, A G, arcu positionis per Reg. 14 Epilogi pro sphæricis rectangulis inuenitur angulus, A G B, addendo Mes. cruris, B A, hoc est Mes. comp. eleuationis polaris cum Tomolog. 2 arcus positionis, A G, & fit (dempta Vnitate &c.) Mes. anguli, A G B, quem

facit Æquator cum Horizonte, qui est comp. eleuationis poli, hoc est fit Mes. 2 eleuationis poli super circulum positionis, B G D; nempè Mes. 2 ipsius, arcus, E O. Aliter quoque, potest addi pro Mes. 2 eleuationis poli, eius Mes. cum Log. arcus positionis, A G, & fiet (dempta Vnitate &c.) Mes. eiusdem circuli positionis, seu arcus, E O: hi enim Logarithmi sunt prædictorum residua ad duplum Log. Radij, vt ad 2000000, quem modum retinui in Exemplis dictæ Appendicis, quorum vnum, nempè pro inueniendo circulo positionis Solis hic libuit adiungere, vt ex eo reliquorum ratio intelligi posit.

Exemplum inueniendi circulum positionis Solis.

Supponitur autem Sol in parte Cœli ascendente, in gr. 12.5'. 42'' Geminorum, vnde eius declinatio, E, est gr. 22. 20' sept. &, A, ascensio recta gr. 70. 35', Medium Cœli gr. 7. 44' Arietis, cuius ascensio recta, B, est gr. 7. 6', quæ dempta ex, A, asc. recta Solis relinquit, C, distantiam à Medio Cœli gr. 63. 29', vnde, H, semidistantia est ferè gr. 31. 44'. Fit verò summa complementi eleuationis poli, ad quam recta est figura cælestis, nempè ipsius, D, &, E, declinationis, quæ est, F, &, G, eorundem differentia. Deinde cum fieri debeat vt Sinus summæ, seu aggregati ex, D, E, ad Sin. eorundem differentiæ, ita Tangens semidistantiæ, H, ad Tang. arcus adiunctiui, ideo per Prob. 5 Trig. planæ addendi essent in vnam summam Tomolog. 2 summæ, F, cum Logar. differentiæ, G, & cum Mesol. H, fieretque (dempto Binario &c.) Mes. arcus adiunctiui: verum in Appendice, quia Tabula caret Tomologarithmis, pro Tomolog. 2 summæ, F, additum fuit cum prædictis Res. Log. eiusdem summæ, F, & in facta summa vnitas tantum deleta est. Habito arcu adiunctiuo, I, I S, adiunctus est semidistantiæ, H, & prouenit arcus positionis, K, cuius Log. iunctus cum Mes. eleuationis poli iuxta superius dicta dedit (dempta Vnitate &c.) circulum positionis, M. Quem an rectè se habeat sic experior. In triangulo rectangulo, G F H, fig. 28 ex dato crure, F H, & angulo opposito, F G H, qui est comp. eleuationis poli, E, super circulum positionis, B G D, inuenitur, F G, crus reliquum, nempè differentia ascensionalis puncti, H, in hoc circulo positionis, per Reg. 10 Epilogi pro sphæricis rectangulis, addendo Mes. 2 anguli, F G H, hoc est Mes. circuli positionis inuenti cum Mesol. H F, declinationis, & fit Log. ipsius, G F, differentiæ ascensionalis, nempè Log. N, quam voco probam, quia addita ipsorum, I, H, minori, I, debet ipsum, H, restituere cum benè operatum est: sicuti, I, demptus ex, H, daret ipsam, N, differentiam ascensionalem: componitur enim distantia, A F, ex arcu positionis, A G, maiori, &, G F, differentia ascensionali minori, & hoc cum, C D, superat, F H, vnde sicuti arcus adiunctiuus additus semidistantiæ componit arcum positionis, A G, ita demptus debet dare differentiam ascensionalem, G F, & ideò è contra differentia ascensionalis, G F, & arcus adiunctiuus debent restituere semidistantiam. Cum verò, C D, minor est, F H, etiam arcus positionis minor est differentia ascensionali, & ideò arcus, qui erat adiunctiuus sit subtractiuus, hoc est debet subtrahi ex semidistantia, vt veniat arcus positionis, & debet eidem addi, vt veniat differentia ascensionalis, ergo simul addentes, I, H, si veniet, N, differentia ascensionalis in hoc secundo casu rectè se habebit operatio, licet Directiones in isto casu non sint in vsu. Res simili modo in cæteris casibus procedit. Vide nunc dictam calculi formam.

	In fig. 28.			*Per Logarith.*
A	*Ascensio recta Solis Sig. sept.*	gr. 70.35'		
B	*Ascensio recta Medij Cœli*	7. 6		*Calculus pro inueniendo Circulo positionis Solis.*
C	*Distantia à Medio Cœli, A F,*	63.29		
D	*Comp. eleuationis Poli, C D,*	46. 0		
E	*Declinatio Solis sept. F H,*	22.20	*m*	961364
F	*Summa ipsorum, E, D,*	68.20	*r l*	003182
G	*Differentia eorundem*	23.40	*l*	960359
H	*Semidistantia à Medio Cœli*	31.44	*m*	979128
I	*Arcus adiunctiuus ipsi, H,*	14.57	*m*	942669
K	*Arcus positionis à Medio Cœli, A G,*	46.41	*l*	986183
L	*Eleuatio poli*	44. 0	*m*	998484
M	*Circulus positionis quæsitus, E O,*	35. 6	*m*	984672
N	*Proba, id est Differentia ascensionalis, G F,*	16.47	*l*	946036

Notandum verò est omnia præcedentia Problemata circa sphærica triangula etiam in Globo aliqualiter solui posse, necnon ope solius Circini in Planisphærio, vt docet Pater Clauius in suo Astrolabio Lib. 3, Canone 22, seu per Circinum geometricum Galilei, & alijs quoque modis, quos breuitatis causa, & quia non adeò exacta, ac per numeros euadit operatio, hic prætermitto.

Notandum deniq; est generaliter circa Logarithmos in vtraq; Trigonometria exercendos, quod absq; respectu ad particulares eorundem Regulas, poterit calculator hoc Præceptum generale firmiter memoriæ mãdare. Vbicunque nempè duo quæuis numeri siue absoluti, siue relatiui, hoc est Si. Ta. Sec. &c. præcipiuntur multiplicandi, huius vice eorum Logarithmi addentur, & summa, seu Logarithmus prouenies dabit in Tabula idem productum, quod ex multiplicatione haberetur. Cum verò vnus datorum numerorum per alium erit diuidendus, subtrahes Logarithmum diuisoris ex Logarithmo diuidendi, & reliquus erit Logarithmus dans in Tabula quotientem. Hoc enim proprium est Logarithmorum vt conuertant multiplicationem in additionem, & diuisionem in subtractionem, sicuti Num. 25 prælud. Trigonometriæ Planæ dicebatur. Quinimmo cuiuscunque numeri bipartito Logarithmo, factum dimidium, vt Logarithmus dabit in Tabula, præcipuè in Chiliade, radicem quadratam eiusdem. Eoq; tripartito, tertia pars vt Logarithmus dabit radicem cubicam. Vt in meæ Centuriæ Probl. 87 pro his, ac aliarum post cubum sequentium dignitatum Cossicarum radicibus inueniendis exemplo declaraui.

Sequitur Epilogus Regularum tam Trigonometriæ planæ, quam sphæricæ, quibus & per Lineas, & per Logarithmos poterit quisq; operari. Cum verò idem quæsitum multipliciter, vt ex antecedentibus patet, haberi possit, selectiores, ac faciliores in eo modos, seu Regulas extendere curaui, vt promptius, ac facilius quam fieri possit, quoscunque calculos absoluere, ac nobilissimæ huius Artis summos apices, nullis remoris, aut ambagibus detentus, benigne Lector, attingere possis. Si tamen varietate delectaris, plures modi, quos tradidi nequaquam erunt tibi negligendi: eos verò ex Indice Problematum suis locis poteris inuenire.

Finis Trigonometriæ Sphæricæ.

EPILOGVS

Regularum vniuerſę Trigonometriæ, tam per Lineas, quam per Logarithmos.

ANtequam verò calculator vtatur infraſcriptis Regulis, videat ſaltem Definitiones vtriuſque Trigonometriæ, ac priora quinque Problemata Trigonom. planæ. Quod ſi recurrerit quoque ad ipſa Problemata, quæ infra citantur in ipſis Regulis, & plures habebit modos propoſitum quæſitum inueniendi; & calculorum formas, quibus harum Regularum vſum faciliorem ſibi comparabit.

In Triangulis Planis Rectangulis vt inuenias

I. EX *data hypotenuſa, & altero acutorum (ex quo reliquus quoque ſcitur)* Crus quodcunque. *Problema 7.*

Pag. 14.

FAc vt Radius 100000, vel plurium, aut pauciorum pro libito ciphrarum, ad hypotenuſam datam in pedibus, vel vlnis &c. ita Sinum anguli acuti dati quæſito cruri oppoſiti, quem ex Canone habebis, ad crus quæſitum, ac notificatum in pedibus, vel vlnis &c.

VEl *Log. hypotenuſæ datæ, iunge cum Logar. anguli acuti dati quæſito cruri oppoſiti: & fiet (dempta Vnitate &c.) Log. cruris quæſiti.*

Vide huius Regulæ duo Exempla, duoſq; calculos pagina 14. Sicuti pro ſubſequentibus Regulis habebis Exempla, & calculorum formas in paginis, quæ è regione ipſarum in margine infra citantur, vbi eas videre poteris, & ad eorũ normam operari.

II. EX *data hypotenuſa, & altero crurum:* Angulos acutos, & ſubinde reliquum crus per primam. *Prob.* 8.

Pag. 16.

FAc vt hypotenuſa data, ad Radium: ita crus datum, ad Sinum anguli quæſiti dato cruri oppoſiti.

VEl *Reſ. Log. hypotenuſæ, iunge Logarithmo cruris dati: & fiet (dempta Vnitate &c.) Log. anguli quæſiti dato cruri oppoſiti.*

III. EX *dato crure, & altero acutorum (ex quo reliquus quoque ſcitur)* Hypotenuſam. *Prob.* 7.

Pag. 15.

FAc vt Radius, ad crus datum: ita Secantem dati acuti cruri dato adiacentis, ad hypotenuſam quæſitam.

VEl *Log. cruris dati, iunge Tomologarithmo dati acuti cruri dato adiacentis: & fiet (dempta Vnitate &c.) Log. hypotenuſæ quæſitæ.*

Pag. 15.

IV. EX *dato crure, & altero acutorum (ex quo reliquus quoque ſcitur)* Crus reliquum. *Prob.* 7.

FAc vt Radius, ad crus datum: ita Tangentem dati acuti cruri dato adiacentis, ad crus reliquum quæſitum.

VEl *Log. cruris dati, iunge Meſ. dati acuti cruri dato adiacentis: & fiet (dempta Vnitate &c.) Log. reliqui cruris quæſiti.*

Pag. 16.

V. EX *datis cruribus:* Angulos acutos, & ſubinde hypotenuſam per tertiam. *Prob.* 8.

FAc vt quoduis datorum crurum, ad Radium: ita crus reliquum datum, ad Tang. acuti quæſiti, eidem reliquo cruri oppoſiti.

VEl *Reſ. Log. cuiuſuis datorum crurum, iunge Log. reliqui dati cruris: & fiet (dempta Vnitate &c.) Meſol. acuti quæſiti, eidem reliquo cruri oppoſiti.*

In Triangulis Planis Obliquangulis vt inuenias

Pag. 17.

I. EX *datis duobus cruribus, & angulo vni oppoſito, nota ſpecie anguli reliquo datorum oppoſiti:* Angulum reliquo datorum crurum oppoſitum, & ſubinde angulum verticalem, & baſim per ſecundam ſubſequentem. *Prob.* 9.

FAc vt datum crus dato angulo oppoſitum, ad Sinum dati anguli oppoſiti: ita reliquum datum crus quæſito angulo oppoſitum, ad Sinum anguli quæſiti, ex hypoteſi ſpecie noti.

VEl *Reſ. Log. dati creris dato angulo oppoſiti, iunge Log. dati anguli oppoſiti, vna cum Log. reliqui dati cruris quæſito angulo oppoſiti: & fiet (dempto Binario &c.) Log. anguli quæſiti, ex hypoteſi ſpecie noti.*

II. *EX datis duobus angulis, & crure vni oppoſito :* Crus reliquo datorum oppoſitum, & ſubinde angulum verticalem, & baſim. *Prob.* 10.

Pag. 18.

FAc vt Sinus dati anguli dato cruri oppoſiti, ad ipſum datum crus oppoſitum : ita Sinum reliqui anguli dati, ad reliquum crus quæſitum.

VEl Tomolog. 2 *dati anguli dato cruri oppoſiti, iunge Logar. dati cruris oppoſiti, vna cum Logar. reliqui anguli dati : & fiet (dempto Binario &c.) Log. cruris quæſiti.*

Recordare autem cum eſt ſumendus Tom. graduũ ſupra 90, & infra 180. ſumendum eſſe Tom. ſupplementi eorundem graduũ, vel Tom. 2 exceſſus ſup a 90. Et pro Tom. 2 graduum ſupra 90, accipiendũ eſſe Tom. exceſſus ſupra gr. 90 : vt in Probl. primo nedum circa Tom. ſed & circa reliquos Loga ithmos, & Lineas dicebatur.

III. *EX datis cruribus, & angulo verticali :* Angulos ad baſim, & ſubinde etiam ipſam baſim per ſecundam antecedentem. *Prob.* 11, *&* 12.

Pag. 19.

FAc vt aggregatum datorum crurum, ad eorum differentiam : ita Tangentem datæ ſemiſummæ angulorum ad baſim, ad Tangentem differentiæ infra, vel ſupra eãdem ſemiſummam. Hanc inuentam differentiam adde ſemiſummæ, & fiet angulus maior, deme, & fiet angulus minor.

VEl Reſ. Logar. *aggregati datorum crurum, iunge Log. eorundem differentiæ, vna cum Meſ. datæ ſemiſummæ angulorum ad baſim : & fiet (dempto Binario &c.) Meſ. differentiæ infra, vel ſupra eandem ſemiſummam. Hanc inuentam differentiam adde ſemiſummæ, & fiet angulus maior, deme, & fiet angulus minor.*

IV. *EX datis tribus lateribus :* Angulum quemuis. *Prob.* 13, *&* 14.

Pag. 22.

FAc vt datum latus maximum, ad ſummam reliquorum datorum laterum : ita ipſorum differentiam, ad ſegmentum lateris maximi, quo dempto, in relicti dimidium perpendiculum cadit.

VEl Reſ. Log. *dati lateris maximi, iunge Log. ſummæ reliquorum datorum laterum, vna cum Log. differentiæ eorundem : & fiet (dempto Binario &c.) Log. ſegmenti lateris maximi ſuperius dicti.*

INuentum ſegmentum adde dimidio reliqui lateris maximi, fietque crus trianguli rectanguli, in quo per Secundam Rectangulorum angulos acutos notificabis. Et hoc idem efficies in altero triangulo rectangulo à perpendiculo conſtituto, ex quo ſingulos propoſiti trianguli obliquanguli angulos obtinebis.

NOta *autem in omnibus præfatis Regulis Reſ. Log. ſumendum eſſe ad duplum Logarith. Radij, nempè ad* 2000000 *, vel* 20000000 *&c. vt in Probl.* 5 *Trigon. planæ præmonitum eſt.*

In Triangulis Sphæricis Rectangulis vt inuenias

Pag. 33. Ad huius normam calculos subsequentium 16 Regularum extendere poteris, omnes enim huic similes erunt, excepta nominum mutatione pro ipsarũ Regularum varietate.

I. EX *data hypotenusa, & angulo adiacente:* Crus dato angulo oppositum. *Vide Prob.* 1 *in quo hæ* 16 *Regulæ vnico Exemplo huic primæ Regulæ applicato dilucidantur.*

FAc vt Radius, ad Sinum anguli dati: ita Sinum datæ hypotenusæ, ad Sinum cruris quæsiti, angulo dato oppositi, eique specie conformis.

VEl *Log. anguli dati iunge cum Log. hypotenusæ: & fiet (dẽpta Vnitate &c.) Log. cruris quæsiti, angulo dato oppositi, eique specie conformis.*

II. EX *data hypotenusa, & angulo adiacente quadrante minoribus:* Crus dato angulo adiacens.

FAc vt Radius, ad Secantem anguli dati: ita Tang. 2 datæ hypotenusæ, ad Tang. 2 cruris quæsiti, angulo dato adiacentis, quadrante minoris.

VEl *Tomolog. anguli dati, iunge Mes. 2 hypotenusæ datæ: & fiet (dempta Vnitate &c.) Mesol. 2 cruris quæsiti, angulo dato adiacentis acuti.*

III. EX *data hypotenusa, & angulo adiacente quadrante minoribus:* Angulum reliquum obliquum.

FAc vt Radius ad Sinum 2 hypotenusæ datæ: ita Tang. anguli dati, ad Tang. 2 anguli reliqui quęsiti, quadrante minoris.

VEl *Log. 2 hypotenusæ datæ, iunge Mes. anguli dati: & fiet (dempta Vnitate &c.) Mes. 2 anguli reliqui quæsiti acuti.*

IV. EX *data hypotenusa, & altero crurum:* Angulum dato cruri oppositum.

FAc vt Radius, ad Secantem 2 hypotenusæ datæ: ita Sinum dati cruris, ad Sinum anguli eidem oppositi quæsiti, specie conformis dato cruri.

VEl *Tomolog. 2 hypotenusæ datæ, iunge Log. dati cruris: & fiet (dempta Vnitate &c.) Log. anguli eidem oppositi quæsiti, specie conformis dato cruri.*

V. EX *data hypotenusa, & altero crurum quadrante minoribus:* Angulum dato cruri adiacentem.

FAc vt Radius, ad Tangentem dati cruris: ita Tang. 2 hypotenusæ datæ, ad Sinum 2 anguli quæsiti, dato cruri adiacentis, acuti.

VEl *Mes. dati cruris, iunge Mes. 2 hypotenusæ datæ: & fiet (dempta Vnitate &c.) Log. 2 anguli quæsiti dato cruri adiacentis, acuti.*

VI. EX *data hypotenusa, & altero crurum quadrante minoribus:* Crus reliquum.

FAc vt Radius, ad Sinum 2 cruris dati: ita Secantem hypotenusæ datæ, ad Secantem reliqui cruris.

VEl *Log. 2 cruris dati, iunge Tomolog. hypotenusæ datæ: & fiet (dempta Vnitate &c.) Tomolog. reliqui cruris.*

VII. EX *dato crure, & angulo adiacente quadrante minoribus:* Crus reliquum.

FAc vt Radius, ad Sinum dati cruris: ita Tangentem anguli dati, ad Tangentem reliqui cruris quæsiti.

VEl *Log. dati cruris, iunge Mes. anguli dati: & fiet (dempta Vnitate &c.) Mes. reliqui cruris quæsiti.*

VIII. EX *dato crure, & angulo adiacente:* Angulum dato cruri oppositum.

FAc vt Radius, ad Sinum anguli dati: ita Sinum 2 cruris dati, ad Sinum 2 reliqui anguli quæsiti, dato cruri specie conformis.

VEl *Log. anguli dati, iunge Log. 2 cruris dati: & fiet (dempta Vnitate &c.) Log. 2 reliqui anguli quæsiti, dato cruri specie conformis.*

IX. EX *dato crure, & angulo adiacente quadrante minoribus:* Hypotenusam.

FAc vt Radius, ad Sin. 2 anguli dati: ita Tang. 2 cruris dati, ad Tang. 2 hypotenusæ quæsitæ, quadrante minoris.

VEl *Log. 2 anguli dati, iunge Mes. 2 cruris dati: & fiet (dempta Vnitate &c.) Mes. 2 hypotenusæ quæsitæ, quadrante minoris.*

X. EX *dato crure, angulo oppoſito, ac ſpecie vnius obliquarum partium reliquarum, ſingillatim quadrante minoribus:* Crus reliquum.

FAc vt Radius, ad Tang. 2 anguli dati: ita Tangentem dati cruris, ad Sinum reliqui cruris quæſiti, quadrante minoris.

VEl *Meſ. 2 anguli dati, iunge Meſ. dati cruris: & fiet (dempta Vnitate &c.) Log. reliqui cruris quæſiti, quadrante minoris.*

XI. EX *dato crure, angulo oppoſito, ac ſpecie vnius obliquarum partium reliquarum:* Hypotenuſam.

FAc vt Radius, ad Secantem 2 anguli dati: ita Sinum dati cruris, ad Sinum hypotenuſæ quæſitæ, quæ erit quadrante minor, cruribus inter ſe, vel angulis obliquis inter ſe ſpecie concordantibus: & quadrante maior, ijſdem non concordantibus.

VEl *Tomolog. 2 anguli dati, iunge Log. dati cruris: & fiet (dempta Vnitate &c.) Log. hypotenuſæ quæſitæ, cuius ſpeciem ſcies vt ſupra &c.*

XII. EX *dato crure, angulo oppoſito, ac ſpecie vnius obliquarum partium, ſingillatim quadrante minoribus:* Angulum reliquum.

FAc vt Radius, ad Secantem dati cruris: ita Sinum 2 dati anguli, ad Sinum reliqui anguli quæſiti, quadrante minoris.

VEl *Tomolog. dati cruris, iunge Logar. 2 dati anguli: & fiet (dempta Vnitate &c.) Log. reliqui anguli quæſiti, quadrante minoris.*

XIII. EX *datis cruribus:* Hypotenuſam.

FAc vt Radius ad Sinum 2 cuiuſuis datorum crurum: ita Sinum 2 reliqui dati cruris, ad Sinum 2 hypotenuſæ quæſitæ, quadrante minoris, ſi crura ſpecie concordauerint, & quadrante maioris, ſi non concordauerint.

VEl *iunge ſimul Logarithmos ſecundos datorum crurum: & fiet (dempta Vnitate &c.) Log. 2 hypotenuſæ quæſitæ, ac ſpeciei vt dictum eſt &c.*

XIV. EX *datis cruribus quadrante minoribus:* Angulum cuiuis oppoſitum.

FAc vt Radius, ad Tangentem dati cruris, quæſito angulo oppoſiti: ita Secantem 2 reliqui dati cruris, ad Tangentem anguli quæſiti.

VEl *Meſ. dati cruris quæſito angulo oppoſiti, iunge Tomolog. 2 reliqui dati cruris: & fiet (dempta Vnitate &c.) Meſ. anguli quæſiti.*

XV. EX *datis angulis obliquis quadrante minoribus:* Hypotenusam.

FAc vt Radius, ad Tang. 2 cuiusuis datorum angulorum: ita Tang. 2 reliqui dati anguli obliqui, ad Sinum 2 hypotenusæ quæsitæ, quadrante minoris.

VEl iunge simul Mesologarithmos secundos datorum angulorum obliquorum: & fiet (dempta Vnitate &c.) Log. 2 hypotenusæ quæsitæ, quadrante minoris.

XVI. EX *datis angulis obliquis:* Crus cuiuis oppositum.

FAc vt Radius, ad Sinum 2 dati anguli quæsito cruri oppositi: ita Secantem 2 reliqui dati anguli obliqui, ad Sinum 2 cruris quæsiti, & opposito angulo specie conformis.

VEl Log. 2 dati anguli quæsito cruri oppositi, iunge Tomolog. 2 reliqui dati anguli obliqui: & fiet (dempta Vnitate &c.) Log. 2 cruris quæsiti, & opposito angulo specie conformis.

In Triangulis Sphæricis Obliquangulis vt inuenias

I. EX *datis duobus cruribus, & angulo vni opposito, ac specie anguli reliquo datorum oppositi:* Angulum reliquo datorum crurum oppositum. *Prob.* 2.

Pag. 36.

FAc vt Sinus cruris dato angulo oppositi, ad Sinum dati anguli: ita Sinum reliqui dati cruris, ad Sinum anguli quæsiti, ex hypotesi specie noti.

VEl Tomolog. 2 cruris dato angulo oppositi, iunge Log. dati anguli, vna cũ Log. reliqui dati cruris: & fiet (dempto Binario &c.) Log. anguli quæsiti, ex hypotesi specie noti.

II. EX *datis cruribus singillatim quadrante minoribus, & angulo vni opposito, ac specie anguli reliquo datorum oppositi:* Basim. *Prob.* 2.

Pag. 36.

PRimò fac vt Radius, ad Secantem anguli dati (vel eius supplementi &c.) ita Tang. 2 cruris angulo dato adiacentis, ad Tang. 2 Inuenti primi, quadrãte minoris.

Secundò fac vt Sinus 2 cruris angulo dato adiacentis, ad Sinum 2 reliqui cruris: ita Sinum 2 Inuenti primi, ad Si. 2 Inuenti secundi, quadrante minoris.

Tertiò adde hæc duo Inuenta, cum anguli cruribus oppositi sunt eiusdem speciei: vel deme minus ex maiori, cum sunt diuersæ speciei, & proueniet basis quæsita.

VEl primò Tomolog. anguli dati (vel eius supplementi) iunge Mes. 2 cruris angulo dato adiacentis, & fiet (dempta Vnitate &c.) Mes. 2 Inuenti primi, quadrante minoris.

Secundò iunge Tomolog. cruris angulo dato adiacentis, cum Log. 2 reliqui cruris, & cum Log. 2 Inuenti primi: & fiet (dempto Binario &c.) Log. 2 Inuenti secundi, quadrante minoris.

Tertiò adde, vel deme hæc Inuenta, vt supra &c. & proueniet basis quæsita.

III. EX datis cruribus singillatim quadrante minoribus, & angulo vni opposito, ac specie anguli reliquo datorum oppositi : Angulum verticalem. *Prob.* 2.

Pag. 36.

PRimò fac vt Radius ad Tangentem anguli dati (vel eius supplementi &c.) ita Sinum 2 cruris dato angulo adiacentis, ad Tang. 2 Inuenti primi, quadrante minoris.

Secundò fac vt Tangens 2 cruris dato angulo adiacentis, ad Tang. 2 reliqui dati cruris: ita Sinum 2 Inuenti primi, ad Sinum 2 Inuenti secundi, quadrante minoris.

Tertiò adde hæc duo Inuenta, cum anguli cruribus oppositi fuerint eiusdem speciei: vel si diuersæ, deme minus ex maiori, prouenietq; angulus verticalis quæsitus.

VEl primò Mes. anguli dati (aut illius suppl. &c.) iunge Logar. 2 cruris dato angulo adiacentis: & fiet (dempta Vnitate &c.) Mes. 2 Inuenti primi, quadrante minoris.

Secundò Mes. cruris dato angulo adiacentis, iunge cum Mesol. 2 reliqui dati cruris, & cum Logar. 2 Inuenti primi: & fiet (dempto Binario &c.) Logar. 2 Inuenti secundi, quadrante minoris.

Tertiò adde, vel deme hæc Inuenta, vt supra &c. & proueniet angulus verticalis quæsitus.

IV. EX datis duobus angulis, & crure vni opposito, ac specie cruris reliquo datorum oppositi: Hoc ipsum Crus reliquo angulorum datorum oppositum. *Prob.* 3.

Pag. 37.

FAc vt Sinus anguli dato cruri oppositi, ad Sinum ipsius cruris oppositi: ita Sinum reliqui anguli dati, ad Sinum cruris quæsiti, ex hypotesi specie noti.

VEl Tomolog. 2 anguli dato cruri oppositi, iunge Log. ipsius cruris oppositi, una cum Log. reliqui anguli dati: & fiet (dempto Binario &c.) Log. cruris quæsiti, ex hypotesi specie noti.

V. EX datis duobus angulis acutis, & crure vni opposito, ac specie cruris reliquo datorum oppositi : Basim. *Prob.* 3.

Vt in pag. 36

PRimò fac vt Radius, ad Secantem anguli dato cruri adiacentis: ita Tang. 2 eiusdem dati cruris, ad Tang. 2 Inuenti primi, dato cruri specie conformis.

Secundò fac vt Tangens 2 anguli dato cruri adiacentis, ad Tang. 2 reliqui anguli dati: ita Sinum Inuenti primi, ad Sinum Inuenti secundi, specie conformis cruri non dato.

Tertiò adde hæc Inuenta, & prodibit basis quæsita.

VEl primò Tomolog. anguli dato cruri adiacentis, iunge cum Mes. 2 eiusdem cruris dati: & fiet (dempta Vnitate &c.) Mes. 2 Inuenti primi, dato cruri specie conformis.

Secundò iunge Mes. anguli dati, noto cruri adiacentis, cum Mes. 2 reliqui anguli noti, & cum Log. Inuenti primi: & fiet (dempto Binario &c.) Log. Inuenti secundi, specie conformis cruri non dato.

Tertiò adde hæc Inuenta, & prodibit basis quæsita.

VI. EX *datis duobus angulis acutis, & crure vni oppoſito, ac ſpecie cruris reliquo datorum oppoſiti :* Angulum verticalem. *Prob.* 3.

Vt in pag. 36.

PRimò fac vt Radius, ad Sinum 2 cruris dati: ita Tang. anguli eidem dato cruri adiacentis, ad Tang. 2 Inuenti primi, dato cruri ſpecie conformis.

Secundò fac vt Sinus 2 anguli dato cruri adiacentis, ad Sinum 2 reliqui dati anguli: ita Sinum Inuenti primi, ad Sinum Inuenti ſecundi, ſpecie conformis cruri non dato.

Tertiò adde hæc Inuenta, & proueniet angulus verticalis quæſitus.

VEl primò *Log. 2 cruris dati iunge cum Meſ. anguli eidem dato cruri adiacentis: & fiet (dempta Vnitate &c.) Meſ. 2 Inuenti primi, dato cruri ſpecie conformis.*

Secundò iunge Tomolog. anguli dato cruri adiacentis, cum Log. 2 reliqui dati anguli, & cum Log. Inuenti primi: & fiet (dempto Binario &c.) Log. Inuenti ſecundi, ſpecie conformis cruri non dato.

Tertiò adde hæc Inuenta, & proueniet angulus verticalis quæſitus.

VII. EX *datis cruribus, & angulo verticali :* Baſim. *Prob.* 4.

Pag. 40.

PRimò fac vt Radius, ad Sinum alterutrius crurum: ita Sinum reliqui cruris, ad Inuentum primum.

Secundò fac vt Radius, ad Inuentum primum: ita Sinum verſum anguli verticalis, ad Inuentum ſecundum.

Tertiò adde Inuentum ſecundum Sinui verſo differentiæ crurum, & proueniet Sinus verſus baſis quæſitæ.

VEl (*angulo verticali acuto, & ſaltem altero crurum exiſtente quadrante minori*) *primò Tomolog. anguli verticalis, iunge Meſ. 2 cruris quadrante minoris: & fiet (dempta Vnitate &c.) Meſ. 2 Inuenti primi, quadrante minoris.*

Secundò confer Inuentum primum cum reliquo crure, demendo minus ex maiori, & habebis Inuentum ſecundum.

Tertiò iunge ſimul Logar. 2 primò aſſumpti cruris, cum Tomolog. Inuenti primi, & cum Log. 2 Inuenti ſecundi: & fiet (dempto Binario &c.) Log. 2 baſis, quæ in ſpecie cum Inuento ſecundo ſemper concordabit.

VIII. EX *datis cruribus ſemicirculum inſimul non excedentibus, & angulo verticali :* Angulos reliquos. *Prob.* 5.

Pag. 43 *per Logarithmos.*

PRimò fac vt Sinus 2 ſemiaggregati crurum, ad Sinum 2 ſemidifferentiæ eorundem: ita Tang. 2 ſemianguli verticalis, ad Tang. ſemiſummæ angulorum ad baſim.

Secundò fac vt Sinus eiuſdem ſemiaggregati crurum, ad Sinum eorundem ſemidifferentiæ: ita Tang. 2 ſemianguli verticalis, ad Tang. ſemidifferentiæ angulorum ad baſim.

Tertiò adde inuentam ſemidifferentiam ſemiſummæ, & fiet angulus maior: deme, & fiet angulus minor quæſitus.

VEl *primò iunge ſimul Tomolog. ſemiaggregati crurum, cum Log. 2 ſemidifferentiæ eorundem, & cum Meſol. 90 ſemianguli verticalis: & fiet (dempto Binario &c.) Meſ. ſemiſummæ angulorum ad baſim.*

Secundò iunge ſimul Tomolog. 2 ſemiaggregati crurum, cum Logar. eorundem ſemidifferentiæ, & cum Meſ. 2 ſemianguli verticalis: & fiet (dempto Binario &c.) Meſ. ſemidifferentiæ angulorum ad baſim.

Tertiò adde inuentam ſemidifferentiam ſemiſummæ, proueniet q; angulus maior: deme, & fiet angulus minor quæſitus.

IX. EX *data basi, & angulis eidem adiacentibus:* Angulum verticalem. *Prob.* 6.

Pag. 44.

PRimò fac vt Radius, ad Sinum alterutrius datorum angulorum: ita Sinum reliqui anguli, ad Inuentum primum.

Secundò fac vt Radius, ad Inuentum primum: ita Sinum versum basis, ad Inuentum secundum.

Tertiò adde Inuentum secundum Sinui verso differentiæ inter vtrumuis datorum angulorum, & reliqui supplementum: & fiet Sinus versus anguli verticalis quæsiti.

VEl (*basi quadrante minori, & altero saltem datorum angulorum acuto existente*) *primò Log.* 2 *hypotenusæ, iunge cum Mes. anguli dati acuti: & fiet* (*dempta Vnitate &c.*) *Mes.* 2 *Inuenti primi, quadrante minoris.*

Secundò confer Inuentum primum cum reliquo angulo dato, demendo minus ex maiori, & habebis Inuentum secundum.

Tertiò iunge simul Log. 2 *anguli primò assumpti, cum Tomolog.* 2 *Inuenti primi, & cum Log. Inuenti secundi: & fiet* (*dempto Binario &c.*) *Log.* 2 *anguli verticalis acuti, nisi cum Inuentum primum erit maius reliquo angulo dato, tunc enim erit obtusus.*

X. EX *data basi, & angulis eidem adiacentibus, duos tamen rectos non excedentibus:* Vtraque crura. *Problema* 7.

Pag. 47 *per Logarithmos.*

PRimò fac vt Sinus 2 semiaggregati angulorum ad basim, ad Sinum 2 semidifferentiæ eorundem: ita Tang. semibasis, ad Tang. semisummæ crurum.

Secundò fac vt Sinus semiaggregati angulorum ad basim, ad Sinum semidifferentiæ eorundem: ita Tang. semibasis, ad Tang. semidifferentiæ crurum.

Tertiò adde inuentam semidifferentiam semisummæ, & fiet crus maius: deme, & fiet crus minus quæsitum.

VEl *Tomolog. semiaggregati angulorum ad basim, iunge cum Log.* 2 *semidifferentiæ eorundem, & cum Mes. semibasis: & fiet* (*dempto Binario &c.*) *Mes. semisummæ crurum.*

Secundò iunge simul Tomolog. 2 *semiaggregati angulorum ad basim, cum Log. semidifferentiæ eorundem, & cum Mes. semibasis: & fiet* (*dempto Binario &c.*) *Mesol. semidifferentiæ crurum.*

Tertio adde inuentam semidifferentiam semisummæ, & fiet crus maius: deme, & fiet crus minus quæsitum.

XI. EX *datis tribus lateribus, seu ex datis cruribus, & basi:* Angulum verticalem. *Prob.* 8.

Pag. 48 *per Lineas, & pag.* 51 *per Logarithmos.*

PRimò fac vt Radius, ad Secantem 2 alterutrius crurum: ita Secantem 2 reliqui cruris, ad Inuentum.

Secundò fac vt Radius, ad Inuentum: ita differentiam Sinuum versorum basis, & differentiæ crurum, ad Sinum versum anguli verticalis quæsiti.

VEl *Tomologarithmos secundos crurum, iunge simul cum Log. semisummæ, & cum Log. semidifferentiæ basis, & differentiæ crurum: & fiet* (*relicta vltimo loco ad sinistram tantum Vnitate &c.*) *Logarithmus, cuius dimidium erit Logarith. semianguli verticalis, ex quo integrum angulum verticalem quæsitum obtinebis.*

XII. EX *datis tribus angulis, seu ex angulo verticali, & duobus basi adiacentibus :* Ipsam basim. *Probl. 9.*

Pag. 53 per Lineas, & pag. 53, & 54 per Logarithmos.

PRimò fac vt Radius, ad Secantem secundam alterutrius angulorum quæsitæ basi adiacentium : ita Secantem secundam reliqui eorũdem angulorum basi adiacentium, ad Inuentum.

Secundò fac vt Radius ad Inuentum : ita differentiam duorum Sinuum versorum (quorum vnus est anguli verticalis, alter verò differentiæ inter vnum, quemuis duorum angulorum basi adiacentium, & supplementum reliqui) ad Sinum versum basis quæsitæ.

VEl *Tomologarithmos secundos angulorum basi adiacentium, iunge cum Log. semisummæ, & cum Log. semidifferentiæ supplementi anguli verticalis, & differentiæ angulorum ad basim : & fiet (relicta vltimo loco ad sinistram tantum Vnitate) Logarithmus, cuius dimidium erit Logar. 2 semibasis, ex qua integram quoq; basim quæsitam obtinebis.*

Cum sequent spatium vocaturum esset, ideò pauca, quæ sequuntur, fortè non inutilia, adiungere volui.

XIII. EX *datis cruribus singillatim quadrante minoribus, & angulo verticali (ducto à vertice super basim perpendiculo)* Vtrumq; angulorum ipsi perpendiculo adiacentium vno actu notificare. *Prob.* 10.

Pag. 58, licet hic calculus parumper variet ab hac Regula.

FAc vt Sinus aggregati crurum, ad Sinum differentiæ eorundem : ita Tangentem 2 semianguli verticalis, ad Tangentem anguli : quem adde semiangulo verticali, & fiet angulus maior : deme minorem ex maiori, & fiet angulus minor. Maior autem erit adiacens cruri maiori, & minor, adiacens minori.

VEl *Tomolog. 2 aggregati crurum, iunge Log. differentiæ eorundem, vna cum Mes. 2 semianguli verticalis : & fiet Mes. anguli ; quem adde semiangulo verticali, & fiet angulus maior : deme minorem ex maiori, & fiet angulus minor.*

XIV. EX *datis duobus angulis acutis basi adiacentibus, & ipsa basi (ducto super ipsam à vertice perpendiculo)* Vtrumq; Casum vno actu inuenire.

Hæc per triãgulum reciprocum ex superiori deducta est.

FAc vt Sinus aggregati datorum angulorum, ad Sinum differentiæ eorundem : ita Tangentem semibasis, ad Tangentem arcus, quem adde semibasi, & constitues casum maiorem : deme minorem ex maiori, & efficies casum minorem. Maior autem casus erit adiacens angulo minori dato, & minor, adiacens maiori.

VEl *Tomolog. 2 aggregati datorum angulorum, iunge Logar. differentiæ eorundem, vna cum Mes. semibasis, & fiet Mes. arcus, quem adde semibasi, & constitues casum maiorem, deme minorem ex maiori, & efficies casum minorem.*

NOtandum verò est per Regulam 13 superiorem posse quoq; angulos ad basim disiunctim, necnon ipsam basim inueniri. Vt ex. gr. in fig. 25 datis cruribus, S Z, Z P, singillatim quadrante minoribus, & angulo, Z, verticali, & inuentis per eam vt supra vno actu angulis, S Z A, A Z P; postmodum ex nota hypot. S Z, & angulo adiacente, S Z A, per Reg. 3 Rectangulorum notificabimus, Z S A: sicuti per eandem ex, Z P, & angulo, P Z A, notificabimus, Z P A. Pariter per Reg. 1 eorundem Rectangulorum ex, S Z, S Z A, fiet notus casus, S A: & ex, Z P, A Z P, casus, A P; vnde, S A, A P, simul iunctis, fiet nota ipsa basis, S P. Nec aliter procedemus circa triangulum, S Z B. Per Reg. 14 verò ex datis duobus angulis basi adiacentibus acutis, & ipsa basi, vt in eadem fig. 25 ex angulis, Z S P, Z P S, & basi, S P, datis notificabuntur nedum vtriq; casus, S A, A P, vno actu, sed & ipsa crura, S Z, Z P, disiunctim, per Reg. 9 Rectangulorum: & per Reg. 8 vtriq; anguli, S Z A, A Z P, quorum summa dabit angulum verticalem, S Z P: sicuti differentia angulorum, S Z A, B Z A, daret angulum verticalem, S Z B, pro triangulo, Z S B.

Notandum denique est, cum sit idem Sinus aggregati complementorum crurum singillatim quadrante minorum, & aggregati eorundem crurum (hæc enim duo aggregata æquantur semicirculo) ideò in Prob. 10 vbicunq; vsurpauimus Sinum aggregati complementorum crurum, substitue Sinum aggregati crurum. Licet enim & illud verum sit, melius tamen est, si hoc modo illa proportio explicetur, sicuti in duabus proximis Regulis eandem adhibuimus. Parce verò, benigne Lector, si tunc rem hanc non animaduerterim, etenim quandoq; bonus dormitat Homerus.

Sic eadem quoq; est differentia crurum, & complementorum eorundem, vnde & idē Sinus.

Epilogi Regularum Vniuersæ Trigonometriæ Finis.

CANON DVPLEX

TRIGONOMETRICVS

Seu

Tabula Sinuum, Tangentium, & Secantium ad Radium 10000000:

Et eorundem Logarithmorum, ad Radij Logarithmum 10,00000000.

Cum adiecta in fine Chiliade Numerorum absolutorum ab Vnitate vsq; ad 1000, & eorum Logarithmis, ac differentijs.

O ′ ″	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0.0	0	0	100000,00	0	0	1000000,00
10	4.85	4.85	100000.00	568557,49	568557.49	1000000.00
20	9.70	9.70	100000.00	598660,49	598660.49	1000000.00
30	14.54	14.54	100000.00	616269,61	616269.61	1000000.00
40	19.39	19.39	100000.00	628763,49	628763.49	1000000.00
50	24.24	24.24	100000.00	638454,49	638454.49	1000000.00
1.0	29.09	29.09	100000.00	646372,61	646372.61	1000000.00
10	33.94	33.94	100000.01	653067,29	653067.29	1000000.00
20	38.79	38.79	100000.01	658866.48	658866.48	1000000.00
30	43.63	43.63	100000.01	663981.73	663981.73	1000000.00
40	48.48	48.48	100000.01	668557.49	668557.49	1000000.01
50	53.33	53.33	100000.01	672696.75	672696.76	1000000.01
2.0	58.18	58.18	100000.02	676475.61	676475.62	1000000.01
10	63.03	63.03	100000.02	679951.82	679951.83	1000000.01
20	67.87	67.87	100000.02	683170.29	683170.30	1000000.01
30	72.72	72.72	100000.03	686166.60	686166.61	1000000.01
40	77.57	77.57	100000.03	688969.48	688969.49	1000000.01
50	82.42	82.42	100000.03	691602.37	691602.39	1000000.02
3.0	87.27	87.27	100000.04	694084.73	694084.75	1000000.02
10	92.11	92.11	100000.04	696432.84	696432.86	1000000.02
20	96.96	96.96	100000.05	698660.48	698660.50	1000000.02
30	101.81	101.81	100000.05	700779.41	700779.43	1000000.02
40	106.66	106.66	100000.06	702799.74	702799.76	1000000.02
50	111.51	111.51	100000.06	704730.25	704730.28	1000000.03
4.0	116.36	116.36	100000.07	706578.60	706578.63	1000000.03
10	121.20	121.20	100000.07	708351.47	708351.50	1000000.03
20	126.05	126.05	100000.08	710054.81	710054.85	1000000.04
30	130.90	130.90	100000.09	711693.85	711693.89	1000000.04
40	135.75	135.75	100000.09	713273.28	713273.32	1000000.04
50	140.60	140.60	100000.10	714797.27	714797.31	1000000.04
5.0	145.44	145.44	100000.11	716269.60	716269.65	1000000.05
10	150.29	150.29	100000.11	717693.64	717693.69	1000000.05
20	155.14	155.14	100000.12	719072.46	719072.51	1000000.05
30	159.99	159.99	100000.13	720408.86	720408.92	1000000.06
40	164.84	164.84	100000.14	721705.35	721705.41	1000000.06
50	169.68	169.68	100000.14	722964.27	722964.33	1000000.06
6.0	174.53	174.53	100000.15	724187.71	724187.78	1000000.07
10	179.38	179.38	100000.16	725377.63	725377.70	1000000.07
20	184.23	184.23	100000.17	726535.82	726535.89	1000000.07
30	189.08	189.08	100000.18	727663.92	727664.00	1000000.08
40	193.93	193.93	100000.19	728763.46	728763.54	1000000.08
50	198.77	198.77	100000.20	729835.84	729835.93	1000000.09
7.0	203.62	203.62	100000.21	730882.39	730882.48	1000000.09
10	208.47	208.47	100000.22	731904.29	731904.38	1000000.09
20	213.32	213.32	100000.23	732902.72	732902.82	1000000.10
30	218.17	218.17	100000.24	733878.70	733878.80	1000000.10
40	223.01	223.01	100000.25	734833.23	734833.34	1000000.11
50	227.86	227.86	100000.26	735767.23	735767.34	1000000.11
8.0	232.71	232.71	100000.27	736681.57	736681.69	1000000.12
10	237.56	237.56	100000.28	737577.35	737577.47	1000000.12
20	242.41	242.41	100000.29	738454.44	738454.57	1000000.13
30	247.25	247.25	100000.31	739314.46	739314.59	1000000.13
40	252.10	252.10	100000.32	740157.77	740157.90	1000000.14
50	256.95	256.95	100000.33	740985.02	740985.16	1000000.14
9.0	261.80	261.80	100000.34	741796.81	741796.96	1000000.15
10	266.65	266.65	100000.36	742593.70	742593.86	1000000.16
20	271.50	271.50	100000.37	743376.24	743376.42	1000000.16
30	276.34	276.34	100000.38	744144.91	744145.08	1000000.17
40	281.19	281.19	100000.40	744900.22	744900.39	1000000.17
50	286.04	286.04	100000.41	745642.63	745642.81	1000000.18
10.0	290.89	290.89	100000.42	746372.55	746372.73	1000000.18

° ′	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
60. 0	100000. 00	*Infinita.*	*Infinita.*	1000000. 00	*Infinitus.*	*Infinitus.*
50	100000. 00	2062646703. 27	2062646705, 75	1000000. 00	1431442. 51	1431442. 51
40	100000. 00	1031324411. 66	1031324416. 50	1000000. 00	1401339. 51	1401339. 51
30	100000. 00	687549367. 35	687549374. 64	1000000. 00	1383730. 39	1383730. 39
20	100000. 00	515661932. 65	515661942. 34	1000000. 00	1371236. 51	1371236. 51
10	100000, 00	412529669. 38	412529681. 51	1000000. 00	1361545. 51	1361545. 51
59. 0	100000. 00	343774672. 78	343774687. 32	1000000. 00	1353627. 39	1353627. 39
50	99999. 99	294663971. 79	294663988. 76	1000000. 00	1346932. 71	1346932. 71
40	99999. 99	257831018. 26	257831037. 65	1000000, 00	1341133. 52	1341133. 52
30	99999. 99	229183103. 06	229183124. 88	1000000. 00	1336018. 27	1336018. 27
20	99999. 99	206264773. 97	206264798. 21	999999. 99	1331442. 51	1331442. 52
10	99999. 99	187513450. 87	187513477. 53	999999. 99	1327303. 24	1327303. 25
58. 0	99999. 98	171887314. 58	171887343. 66	999999. 99	1323524. 38	1323524. 39
50	99999. 98	158665225. 57	158665257. 08	999999. 99	1320048. 17	1320048. 18
40	99999. 98	147331982. 14	147332016. 09	999999. 99	1316829. 70	1316829. 71
30	99999. 97	137509857. 48	137509893. 84	999999. 99	1313833. 39	1313833. 40
20	99999. 97	128915480. 03	128915518. 82	999999. 99	1311030. 51	1311030. 52
10	99999. 97	121332206. 29	121332247. 49	999999. 98	1308397. 61	1308397. 63
57. 0	99999. 96	114591531. 93	114591575. 57	999999. 98	1305915. 25	1305915. 27
50	99999. 96	108560389. 37	108560435. 43	999999. 98	1303567. 14	1303567. 16
40	99999. 95	103132371. 90	103132420, 38	999999. 98	1301339. 50	1301339. 52
30	99999. 95	98221307. 62	98221358. 53	999999. 98	1299220. 57	1299220. 59
20	99999. 94	93756694. 23	93756747. 56	999999. 98	1297200. 24	1297200. 26
10	99999. 94	89680316 23	89680371. 98	999999. 97	1295269. 72	1295269. 75
56. 0	99999. 93	85943628. 43	85943686. 60	999999. 97	1293421. 37	1293421. 40
50	99999. 93	82505882. 51	82505943. 11	999999. 97	1291648. 50	1291648. 53
40	99999. 92	79332578. 10	79332641. 13	999999. 96	1289945. 15	1289945. 19
30	99999. 91	76394327. 02	76394392. 47	999999. 96	1288306. 11	1288306. 15
20	99999. 91	73665956. 45	73666024. 32	999999. 96	1286726. 68	1286726. 72
10	99999. 90	71125749. 00	71125819. 30	999999. 96	1285202. 69	1285202. 73
55. 0	99999. 89	68754888. 38	68754961. 10	999999. 95	1283730. 35	1283730. 40
50	99999. 89	66536986. 20	66537061. 34	999999. 95	1282306. 31	1282306. 36
40	99999. 88	64457702. 62	64457780. 19	999999. 95	1280927. 49	1280927. 54
30	99999. 87	62504432. 05	62504512. 04	999999. 94	1279591. 08	1279591. 14
20	99999. 86	60666063. 41	60666145. 83	999999. 94	1278294. 59	1278294. 65
10	99999, 86	58932744. 16	58932829. 01	999999. 94	1277035. 67	1277035. 73
54. 0	99999. 85	57295720. 22	57295807. 48	999999. 93	1275812. 22	1275812. 29
50	99999. 84	55747186. 94	55747276. 63	999999. 93	1274622. 30	1274622, 37
40	99999. 83	54280152. 12	54280244. 23	999999. 93	1273464. 11	1273464. 18
30	99999. 82	52888349. 66	52888444. 20	999999. 92	1272336. 00	1272336. 08
20	99999. 81	51566137. 16	51566234. 12	999999. 92	1271236. 46	1271236. 54
10	99999. 80	50308422. 65	50308522. 04	999999. 91	1270164. 07	1270164. 16
53. 0	99999. 79	49110601. 57	49110703. 38	999999. 91	1269117. 52	1269117. 61
50	99999. 78	47968490. 53	47968594. 77	999999. 91	1268095. 62	1268095. 71
40	99999. 77	46878293. 49	46878400, 15	999999. 90	1267097. 18	1267097. 28
30	99999. 76	45836551. 61	45836660. 69	999999. 90	1266121. 20	1266121. 30
20	99999. 75	44840100. 62	44840212. 13	999999. 89	1265166. 66	1265166. 77
10	99999. 74	43886053. 60	43886167. 53	999999. 89	1264232. 66	1264232. 77
52. 0	99999. 73	42971756. 49	42971872. 85	999999. 88	1263318. 31	1263318. 43
50	99999. 72	42094779. 29	42094898. 06	999999. 88	1262422. 53	1262422. 65
40	99999. 71	41252880. 98	41253002. 19	999999. 87	1261545. 43	1261545. 56
30	99999. 69	40443998. 12	40444121. 75	999999. 87	1260685. 41	1260685. 54
20	99999. 68	39666224. 41	39566350. 46	999999. 86	1259842. 09	1259842. 23
10	99999. 67	38917802. 05	38917930. 53	999999. 86	1259014. 84	1259014. 98
51. 0	99999. 66	38197098. 89	38197229. 79	999999. 85	1258203. 04	1258203. 19
50	99999. 64	37502602. 97	37502736. 29	999999. 84	1257406. 14	1257406. 30
40	99999. 63	36832916. 33	36833046. 08	999999. 84	1256623. 60	1256623. 76
30	99999. 62	36186715. 54	36186853. 71	999999. 83	1255854. 92	1255855. 09
20	99999. 60	35562804. 46	35562945. 06	999999. 83	1255099. 61	1255099. 78
10	99999. 59	34960041. 52	34960184. 55	999999. 82	1254357. 19	1254357. 37
50. 0	99999. 58	34377370. 56	34377516. 00	999999. 82	1253627. 27	1253627. 45

O ′ ″	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
10.0	290.89	290.89	100000.42	746372.55	746372.73	1000000.18
10	295.74	295.74	100000.44	747090.40	747090.59	1000000.19
20	300.58	300.59	100000.45	747796.59	747796.79	1000000.20
30	305.43	305.43	100000.47	748491.47	748491.67	1000000.20
40	310.28	310.28	100000.48	749175.41	749175.62	1000000.21
50	315.13	315.13	100000.50	749848.75	749848.97	1000000.22
11.0	319.98	319.98	100000.51	750511.81	750512.03	1000000.22
10	324.82	324.83	100000.53	751164.89	751165.12	1000000.23
20	329.67	329.67	100000.54	751808.30	751808.54	1000000.24
30	334.52	334.52	100000.56	752442.31	752442.55	1000000.24
40	339.37	339.37	100000.58	753067.20	753067.45	1000000.25
50	344.22	344.22	100000.59	753683.23	753683.49	1000000.26
12.0	349.07	349.07	100000.61	754290.65	754290.91	1000000.26
10	353.91	353.92	100000.63	754889.28	754889.55	1000000.27
20	358.76	358.76	100000.64	755480.56	755480.84	1000000.28
30	363.61	363.61	100000.66	756063.51	756063.80	1000000.29
40	368.46	368.46	100000.68	756638.75	756639.05	1000000.30
50	373.31	373.31	100000.70	757206.45	757206.75	1000000.30
13.0	378.15	378.16	100000.72	757766.84	757767.15	1000000.31
10	383.00	383.00	100000.73	758320.09	758320.41	1000000.32
20	387.85	387.85	100000.75	758866.37	758866.70	1000000.33
30	392.70	392.70	100000.77	759405.87	759406.21	1000000.34
40	397.55	397.55	100000.79	759938.75	759939.09	1000000.34
50	402.39	402.40	100000.81	760465.18	760465.53	1000000.35
14.0	407.24	407.25	100000.83	760985.30	760985.66	1000000.36
10	412.09	412.09	100000.85	761499.25	761499.62	1000000.37
20	416.94	416.94	100000.87	762007.20	762007.58	1000000.38
30	421.79	421.79	100000.89	762509.28	762509.67	1000000.39
40	426.63	426.64	100000.91	763005.62	763006.02	1000000.40
50	431.48	431.49	100000.93	763496.35	763496.75	1000000.40
15.0	436.33	436.34	100000.95	763981.60	763982.01	1000000.41
10	441.18	441.18	100000.97	764461.48	764461.90	1000000.42
20	446.03	446.03	100000.99	764936.12	764936.55	1000000.43
30	450.88	450.88	100001.02	765405.63	765406.07	1000000.44
40	455.72	455.73	100001.04	765870.12	765870.57	1000000.45
50	460.57	460.58	100001.06	766329.69	766730.15	1000000.46
16.0	465.42	465.42	100001.08	766784.45	766784.92	1000000.47
10	470.27	470.27	100001.11	767234.49	767234.97	1000000.48
20	475.12	475.12	100001.13	767679.91	767680.40	1000000.49
30	479.96	479.97	100001.15	768120.84	768121.34	1000000.50
40	484.81	484.82	100001.18	768557.31	768557.82	1000000.51
50	489.66	489.67	100001.20	768989.45	768989.97	1000000.52
17.0	494.51	494.51	100001.22	769417.33	769417.86	1000000.53
10	499.36	499.36	100001.25	769841.03	769841.57	1000000.54
20	504.20	504.21	100001.27	770260.64	770261.19	1000000.55
30	509.05	509.06	100001.30	770676.23	770676.79	1000000.56
40	513.90	513.91	100001.32	771087.88	771088.45	1000000.57
50	518.75	518.76	100001.35	771495.67	771496.25	1000000.58
18.0	523.60	523.60	100001.37	771899.66	771900.26	1000000.60
10	528.44	528.45	100001.40	772299.93	772300.54	1000000.63
20	533.29	533.30	100001.42	772696.55	772697.17	1000000.62
30	538.14	538.15	100001.45	773089.57	773090.20	1000000.63
40	542.99	543.00	100001.47	773479.07	773479.71	1000000.64
50	547.84	547.84	100001.50	773865.11	773865.76	1000000.65
19.0	552.68	552.69	100001.53	774247.75	774248.41	1000000.66
10	557.53	557.54	100001.55	774627.04	774627.72	1000000.68
20	562.38	562.39	100001.58	775003.05	775003.74	1000000.69
30	567.23	567.24	100001.61	775375.84	775376.54	1000000.70
40	572.08	572.09	100001.64	775745.45	775746.16	1000000.71
50	576.93	576.93	100001.66	776111.94	776112.66	1000000.72
20.0	581.77	581.78	100001.69	776475.37	776476.10	1000000.73

′. ″	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
50. 0	99999. 58	34377370. 56	34377516. 00	999999. 82	1253627. 27	1253627. 45
50	99999. 56	33813804. 59	33813952. 46	999999. 81	1252909. 41	1252909. 60
40	99999. 55	33268416. 90	33268567. 20	999999. 80	1252003. 21	1252203. 41
30	99999. 53	32740344. 07	32740496. 79	999999. 80	1251508. 33	1251508. 53
20	99999. 52	32228772. 35	32228927. 49	999999. 79	1250824. 38	1250824. 59
10	99999. 50	31732942. 19	31733099. 75	999999. 78	1250151. 03	1250151. 25
49. 0	99999. 49	31252137. 05	31252297. 04	999999. 78	1249487. 97	1249488. 19
50	99999. 47	30785684. 18	30785846. 60	999999. 77	1248834. 88	1248835. 11
40	99999. 46	30332950. 40	30333115. 24	999999. 76	1248191. 46	1248191. 70
30	99999. 44	29893338. 32	29893505. 58	999999. 76	1247557. 45	1247557. 69
20	99999. 42	29466288. 23	29466457. 92	999999. 75	1246932. 55	1246932. 80
10	99999. 41	29051266. 75	29051438. 86	999999. 74	1246316. 51	1246316. 77
48. 0	99999. 39	28647773. 52	28647948. 06	999999. 74	1245709. 09	1245709. 35
50	99999. 37	25255334. 81	28255511. 77	999999. 73	1245110. 45	1245110. 72
40	99999. 36	27873503. 22	27873682. 60	999999. 72	1244519. 16	1244519. 44
30	99999. 34	27501852. 93	27502034. 74	999999. 71	1243936. 20	1243936. 49
20	99999. 32	27139983. 55	27140167. 78	999999. 70	1243360. 95	1243361. 25
10	99999. 30	26787512. 55	26787699. 21	999999. 70	1242793. 25	1242793. 55
47. 0	99999. 28	26444079. 88	26444268. 95	999999. 69	1242232. 85	1242233. 16
50	99999. 27	26109341. 59	26109533. 09	999999. 68	2241679. 59	1241679. 91
40	99999. 25	25782976. 66	25783165. 59	999999. 67	1241133. 30	1241133. 63
30	99999. 23	25464660. 15	25464856. 50	999999. 66	1240593. 79	1240594. 13
20	99999. 21	25154112. 23	25154311. 01	999999. 66	1240060. 91	1240061. 25
10	99999. 19	24851047. 30	24851248. 50	999999. 65	1239534. 47	1239534. 82
46. 0	99999. 17	24555198. 11	24555401. 74	999999. 64	1239014. 34	1239014. 70
50	99999. 15	24266310. 58	24266516. 63	999999. 63	1238500. 38	1238500. 75
40	99999. 13	23984140. 69	23984349. 16	999999. 62	1237992. 42	1237992. 80
30	99999. 11	23708457. 93	23708668. 83	999999. 61	1237490. 33	1237490. 72
20	99999. 09	23439040. 60	23439253. 92	999999. 60	1236993. 98	1236994. 38
10	99999. 07	23175676. 95	23175892. 70	999999. 60	1236503. 25	1236503. 65
45. 0	99999. 05	22918166. 28	22918384. 45	999999. 59	1236017. 99	1236018. 40
50	99999. 03	22666315. 09	22666535. 68	999999. 58	1235538. 10	1235538. 52
40	99999. 01	22419938. 84	22420161. 86	999999. 57	1235063. 45	1235063. 88
30	99998. 99	22178861. 42	22179086. 86	999999. 56	1234593. 93	1234594. 37
20	99998. 96	21942912. 72	21943140. 58	999999. 55	1234129. 43	1234129. 88
10	99998. 94	21711931. 28	21712161. 57	999999. 54	1233669. 85	1233670. 31
44. 0	99998. 92	21485762. 34	21485995. 05	999999. 53	1233215. 08	1233215. 55
50	99998. 89	21264256. 14	21264491. 27	999999. 52	1232765. 03	1232765. 51
40	99998. 87	21047270. 83	21047508. 39	999999. 51	1232319. 60	1232320. 09
30	99998. 85	20834668. 99	20834908. 97	999999. 50	1231878. 66	1231879. 16
20	99998. 82	20626319. 10	20626561. 51	999999. 49	1231442. 18	1231442. 69
10	99998. 80	20422094. 87	20422339. 70	999999. 48	1231010. 03	1231010. 55
43. 0	99998. 78	20221874. 96	20222122. 22	999999. 47	1230582. 14	1230582. 67
50	99998. 75	20025542. 74	20025792. 42	999999. 46	1230158. 43	1230158. 97
40	99998. 73	19832986. 46	19833238. 56	999999. 45	1229738. 81	1229739. 36
30	99998. 70	19644097. 44	19644351. 97	999999. 44	1229323. 21	1229323. 77
20	99998. 68	19458772. 68	19459029. 64	999999. 43	1228911. 55	1228912. 12
10	99998. 65	19276911. 86	19277171. 24	999999. 42	1228503. 75	1228504. 33
42. 0	99998. 63	19098418. 75	19098680. 55	999999. 40	1228099. 74	1228100. 34
50	99998. 60	18923200. 67	18923464. 90	999999. 39	1227699. 46	1227700. 07
40	99998. 58	18751168. 39	18751434. 95	999999. 38	1227302. 83	1227303. 45
30	99998. 55	18582235. 55	18582504. 62	999999. 37	1226909. 80	1226910. 43
20	99998. 53	18416319. 71	18416591. 21	999999. 36	1226520. 29	1226520. 93
10	99998. 50	18253340. 04	18253613. 96	999999. 35	1226134. 24	1226134. 89
41. 0	99998. 47	18093219. 91	18093496. 26	999999. 34	1225751. 59	1225752. 25
50	99998. 45	17935884. 42	17936163. 19	999999. 32	1225372. 28	1225372. 96
40	99998. 42	17781261. 53	17781542. 72	999999. 31	1224996. 26	1224996. 95
30	99998. 39	17629281 70	17629565. 32	999999. 30	1224623. 46	1224624. 16
20	99998. 36	17479877. 73	17480163. 77	999999. 29	1224253. 84	1224254. 55
10	99998. 34	17332984. 69	17333273. 15	999999. 28	1223887. 34	1223888. 06
40. 0	99998. 31	17188540. 09	17188830. 98	999999. 27	1223523. 90	1223524. 63

O 1°.10	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
20.0	581.77	581.78	100001.69	776475.37	776476.10	1000000.73
10	586.62	586.63	100001.72	776835.77	776836.52	1000000.75
20	591.47	591.48	100001.75	777193.21	777193.97	1000000.76
30	596.32	596.33	100001.78	777547.74	777548.51	1000000.77
40	601.17	601.18	100001.81	777899.39	777900.18	1000000.79
50	606.01	606.02	100001.84	778248.22	778249.02	1000000.80
21.0	610.86	610.87	100001.87	778594.27	778595.08	1000000.81
10	615.71	615.72	100001.90	778937.58	778938.41	1000000.82
20	620.56	620.57	100001.93	779278.20	779279.04	1000000.84
30	625.41	625.42	100001.96	779616.17	779617.02	1000000.85
40	630.25	630.27	100001.99	779951.53	779952.39	1000000.86
50	635.10	635.11	100002.02	780284.32	780285.20	1000000.88
22.0	639.95	639.96	100002.05	780614.58	780615.47	1000000.89
10	644.80	644.81	100002.08	780942.35	780943.25	1000000.90
20	649.65	649.66	100002.11	781267.66	781268.58	1000000.92
30	654.49	654.51	100002.14	781590.55	781591.48	1000000.93
40	659.34	659.36	100002.17	781911.06	781912.00	1000000.94
50	664.19	664.20	100002.21	782229.22	782230.18	1000000.96
23.0	669.04	669.05	100002.24	782545.07	782546.04	1000000.97
10	673.89	673.90	100002.27	782858.64	782859.62	1000000.98
20	678.73	678.75	100002.30	783169.95	783170.95	1000001.00
30	683.58	683.60	100002.34	783479.06	783480.07	1000001.02
40	688.43	688.45	100002.37	783785.98	783787.01	1000001.03
50	693.28	693.29	100002.40	784090.74	784091.79	1000001.04
24.0	698.13	698.14	100002.44	784393.38	784394.44	1000001.06
10	702.97	702.99	100002.47	784693.93	784695.00	1000001.07
20	707.82	707.84	100002.51	784992.41	784993.50	1000001.09
30	712.67	712.69	100002.54	785288.85	785289.96	1000001.10
40	717.52	717.54	100002.57	785583.28	785584.40	1000001.12
50	722.37	722.38	100002.61	785875.74	785876.87	1000001.13
25.0	727.21	727.23	100002.64	786166.23	786167.38	1000001.15
10	732.06	732.08	100002.68	786454.79	786455.96	1000001.16
20	736.91	736.93	100002.72	786741.45	786742.63	1000001.18
30	741.76	741.78	100002.75	787026.23	787027.43	1000001.19
40	746.61	746.63	100002.79	787309.15	787310.36	1000001.21
50	751.45	751.48	100002.82	787590.25	787591.47	1000001.22
26.0	756.30	756.32	100002.86	787869.53	787870.77	1000001.24
10	761.15	761.17	100002.90	788147.03	788148.29	1000001.26
20	766.00	766.02	100002.93	788422.77	788424.04	1000001.27
30	770.85	770.87	100002.97	788696.77	788698.06	1000001.29
40	775.69	775.72	100003.01	788969.05	788970.36	1000001.31
50	780.54	780.57	100003.05	789239.63	789240.96	1000001.32
27.0	785.39	785.41	100003.08	789508.54	789509.88	1000001.34
10	790.24	790.26	100003.12	789775.79	789777.15	1000001.35
20	795.09	795.11	100003.16	790041.41	790042.78	1000001.37
30	799.93	799.96	100003.20	790305.42	790306.81	1000001.39
40	804.78	804.81	100003.24	790567.83	790569.24	1000001.41
50	809.63	809.66	100003.28	790828.66	790830.08	1000001.42
28.0	814.48	814.50	100003.32	791087.93	791089.37	1000001.44
10	819.33	819.35	100003.36	791345.67	791347.13	1000001.46
20	824.17	824.20	100003.40	791601.88	791603.36	1000001.48
30	829.02	829.05	100003.44	791856.60	791858.09	1000001.49
40	833.87	833.90	100003.48	792109.82	792111.33	1000001.51
50	838.72	838.75	100003.52	792361.59	792363.11	1000001.53
29.0	843.57	843.60	100003.56	792611.90	792613.45	1000001.55
10	848.41	848.44	100003.60	792860.77	792862.33	1000001.56
20	853.26	853.29	100003.64	793108.22	793109.80	1000001.58
30	858.11	858.14	100003.68	793354.28	793355.88	1000001.60
40	862.96	862.99	100003.72	793598.94	793600.56	1000001.62
50	867.81	867.84	100003.77	793842.24	793843.88	1000001.64
30.0	872.65	872.69	100003.81	794084.19	794085.84	1000001.65

,'11	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
40.0	99998.31	17188540.09	17188830.98	999999.27	1223523.90	1223524.63
50	99998.28	17046482.65	17046775.96	999999.25	1223163.48	1223164.23
40	99998.25	16906754.24	16907049.98	999999.24	1222806.03	1222806.79
30	99998.22	16769297.77	16769595.93	999999.23	1222451.49	1222452.26
20	99998.19	16634058.27	16634358.86	999999.21	1222099.82	1222100.61
10	99998.16	16500982.55	16501285.56	999999.20	1221750.98	1221751.78
39.0	99998.13	16370019.07	16370324.50	999999.19	1221404.92	1221405.73
50	99998.10	16241118.21	16241426.07	999999.18	1221061.59	1221062.42
40	99998.07	16114231.10	16114541.39	999999.16	1220720.96	1220721.80
30	99998.04	15989311.44	15989624.14	999999.15	1220382.98	1220383.83
20	99998.01	15866313.54	15866628.67	999999.14	1220047.61	1220048.47
10	99997.98	15745193.42	15745510.97	999999.12	1219714.80	1219715.68
38.0	99997.95	15625908.39	15626228.37	999999.11	1219384.53	1219385.42
50	99997.92	15508417.06	15508739.46	999999.10	1219056.75	1219057.65
40	99997.89	15392670.51	15393004.34	999999.08	1218731.42	1218732.34
30	99997.86	15278656.29	15278983.54	999999.07	1218408.52	1218409.45
20	99997.83	15166310.06	15166639.74	999999.06	1218088.00	1218088.94
10	99997.79	15055603.86	15055935.96	999999.04	1217769.82	1217770.78
37.0	99997.76	14946502.05	14946836.57	999999.03	1217453.96	1217454.93
50	99997.73	14838969.98	14839306.93	999999.02	1217140.38	1217141.36
40	99997.70	14732974.24	14733313.62	999999.00	1216829.05	1216830.05
30	99997.66	14628481.72	14628823.52	999998.98	1216519.93	1216520.94
20	99997.63	14525461.08	14525805.30	999998.97	1216212.99	1216214.02
10	99997.60	14423881.24	14424227.88	999998.96	1215908.21	1215909.26
36.0	99997.56	14323712.16	14324061.23	999998.94	1215605.56	1215606.62
50	99997.53	14224924.68	14225276.17	999998.93	1215305.00	1215306.07
40	99997.49	14127490.59	14127844.50	999998.91	1215006.50	1215007.59
30	99997.46	14031381.88	14031738.22	999998.90	1214710.04	1214711.15
20	99997.43	13936572.08	13936930.84	999998.88	1214415.60	1214416.72
10	99997.39	13843034.84	13843396.03	999998.87	1214123.13	1214124.26
35.0	99997.36	13750744.71	13751108.32	999998.85	1213832.62	1213833.77
50	99997.32	13659676.91	13660042.95	999998.84	1213544.04	1213545.21
40	99997.28	13569807.51	13570175.97	999998.82	1213257.37	1213258.55
30	99997.25	13481112.63	13481483.51	999998.81	1212972.57	1212973.77
20	99997.21	13393569.76	13393943.07	999998.79	1212689.64	1212690.85
10	99997.18	13307156.42	13307532.16	999998.78	1212408.53	1212409.75
34.0	99997.14	13221850.90	13222229.06	999998.76	1212129.23	1212130.47
50	99997.10	13137632.02	13138012.60	999998.74	1211851.71	1211852.97
40	99997.07	13054479.32	13054862.33	999998.73	1211575.96	1211577.22
30	99997.03	12972372.35	12972757.78	999998.71	1211301.94	1211303.23
20	99996.99	12891291.83	12891679.69	999998.69	1211029.64	1211030.95
10	99996.95	12811218.47	12811608.75	999998.68	1210759.04	1210760.37
33.0	99996.92	12732133.63	12732526.33	999998.66	1210490.12	1210491.46
50	99996.88	12654019.26	12654414.38	999998.65	1210222.85	1210224.21
40	99996.84	12576857.30	12577254.84	999998.63	1209957.22	1209958.59
30	99996.80	12500630.74	12501030.71	999998.61	1209693.19	1209694.58
20	99996.76	12425322.52	12425724.92	999998.59	1209430.76	1209432.17
10	99996.72	12350916.15	12351320.97	999998.58	1209169.92	1209171.34
32.0	99996.68	12277395.53	12277802.77	999998.56	1208910.63	1208912.07
50	99996.64	12204745.07	12205154.74	999998.54	1208652.87	1208654.33
40	99996.60	12132949.13	12133361.22	999998.52	1208396.64	1208398.12
30	99996.56	12061993.00	12062407.52	999998.51	1208141.91	1208143.40
20	99996.52	11991861.90	11992278.84	999998.49	1207888.67	1207890.18
10	99996.48	11922541.66	11922961.03	999998.47	1207636.89	1207638.41
31.0	99996.44	11854018.02	11854439.81	999998.45	1207386.55	1207388.10
50	99996.40	11786277.59	11786701.81	999998.44	1207137.67	1207139.23
40	99996.36	11719306.90	11719733.54	999998.42	1206890.20	1206891.78
30	99996.32	11653092.90	11653521.96	999998.40	1206644.12	1206645.72
20	99996.28	11587622.82	11588054.31	999998.38	1206399.44	1206401.06
10	99996.23	11522884.22	11523318.13	999998.36	1206156.12	1206157.76
30.0	99996.19	11458865.01	11459301.35	999998.35	1205914.16	1205915.81

O ′ ″	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
30. 0	872. 65	872. 69	100003. 81	794084. 19	794085. 84	1000001. 65
30	887. 20	887. 23	100003. 94	794802. 02	794803. 73	1000001. 71
31. 0	901. 74	901. 78	100004. 07	795508. 19	795509. 96	1000001. 77
30	916. 29	916. 32	100004. 20	796203. 06	796204. 88	1000001. 82
32. 0	930. 83	930. 87	100004. 33	796886. 98	796888. 86	1000001. 88
30	945. 37	945. 41	100004. 47	797560. 30	797562. 24	1000001. 94
33. 0	959. 92	959. 96	100004. 61	798223. 34	798225. 34	1000002. 00
30	974. 46	974. 51	100004. 75	798876. 40	798778. 46	1000002. 06
34. 0	989. 00	989. 05	100004. 89	799519. 80	799521. 92	1000002. 12
30	1003. 55	1003. 60	100005. 04	800153. 79	800155. 98	1000002. 19
35. 0	1018. 99	1018. 14	100005. 18	800778. 67	800780. 92	1000002. 25
30	1032. 63	1032. 69	100005. 33	801394. 67	801396. 99	1000002. 32
36. 0	1047. 18	1047. 24	100005. 48	802002. 07	802004. 45	1000002. 38
30	1061. 73	1061. 78	100005. 64	802601. 08	802603. 53	1000002. 45
37. 0	1076. 27	1076. 33	100005. 79	803191. 95	803194. 47	1000002. 52
30	1090. 81	1090. 87	100005. 95	803774. 77	803777. 35	1000002. 58
38. 0	1105. 35	1105. 42	100006. 11	804350. 09	804352. 74	1000002. 65
30	1119. 90	1119. 97	100006. 27	804917. 78	804920. 50	1000002. 72
39. 0	1134. 44	1134. 51	100006. 44	805478. 14	805480. 93	1000002. 79
30	1148. 98	1149. 06	100006. 60	806031. 36	806034. 23	1000002. 87
40. 0	1163. 53	1163. 61	100006. 77	806577. 63	806580. 57	1000002. 94
30	1178. 07	1178. 15	100006. 94	807117. 11	807120. 13	1000003. 02
41. 0	1192. 61	1192. 70	100007. 11	807649. 97	807653. 06	1000003. 09
30	1207. 16	1207. 24	100007. 29	808176 37	808179. 54	1000003. 17
42. 0	1221. 70	1221. 79	100007. 46	808696. 46	808699. 70	1000003. 24
30	1236. 24	1236. 34	100007. 64	809210. 40	809213. 72	1000003. 32
43. 0	1250. 79	1250. 88	100007. 82	809718 32	809721. 72	1000003. 40
30	1265. 33	1265. 43	100008. 01	810220. 38	810223. 86	1000003. 48
44. 0	1279. 87	1279. 98	100008. 19	810716. 69	810720. 25	1000003. 50
30	1294. 42	1294. 52	100008. 38	811207. 40	811211. 04	1000003. 64
45. 0	1308. 96	1309. 07	100008. 57	811692. 62	811696. 34	1000003. 72
30	1323. 50	1323. 62	100008. 76	812172. 48	812176. 28	1000003. 80
46. 0	1338. 05	1338. 17	100008. 95	812647. 10	812650. 99	1000003. 89
30	1352. 59	1352. 71	100009. 15	813116. 58	813120. 55	1000003. 97
47. 0	1367. 13	1367. 26	100009. 35	813581. 04	813585. 10	1000004. 06
30	1381. 68	1381. 81	100009. 55	814040. 59	814044. 74	1000004. 15
48. 0	1396. 22	1396. 35	100009. 75	814495. 32	814499. 55	1000004. 23
30	1410. 76	1410. 90	100009. 95	814945. 34	814949. 66	1000004. 32
49. 0	1425. 30	1425. 45	100010. 16	815390. 75	815395. 16	1000004. 41
30	1439. 85	1440. 00	100010. 31	815831. 63	815836. 13	1000004. 50
50. 0	1454. 39	1454. 54	100010. 58	816268. 08	816272. 67	1000004. 59
30	1468. 93	1469. 09	100010. 79	816700. 18	816704. 87	1000004. 69
51. 0	1483. 48	1483. 64	100011. 01	817128. 04	817132. 82	1000004. 78
30	1498. 02	1498. 19	100011. 22	817551. 71	817556. 58	1000004. 87
52. 0	1512. 56	1512. 73	100011. 44	817971. 29	817976. 26	1000004. 97
30	1527. 10	1527. 28	100011. 66	818386. 85	818391. 92	1000005. 07
53. 0	1541. 65	1541. 83	100011. 89	818798. 48	818803. 64	1000005. 16
30	1556. 19	1556. 38	100012. 11	819206. 23	819211. 49	1000005. 26
54. 0	1570. 73	1570. 93	100012. 34	819610. 20	819615. 56	1000005. 36
30	1585. 27	1585. 47	100012. 57	820010. 44	820015. 90	1000005. 46
55. 0	1599. 82	1600. 02	100012. 80	820407. 03	820412. 59	1000005. 56
30	1614. 36	1614. 57	100013. 03	820800. 02	820805. 68	1000005. 66
56. 0	1628. 90	1629. 12	100013. 27	821189. 49	821195. 25	1000005. 76
30	1643. 44	1643. 67	100013. 51	821575. 50	821581. 37	1000005. 87
57. 0	1657. 99	1658. 21	100013. 75	821958. 11	821964. 08	1000005. 97
30	1672. 53	1672. 76	100013. 99	822337. 37	822343. 45	1000006. 08
58. 0	1687. 07	1687. 31	100014. 23	822713. 35	822719. 53	1000006. 18
30	1701. 61	1701. 86	100014. 48	823086. 10	823092. 39	1000006. 29
59. 0	1716. 16	1716. 41	100014. 73	823455. 68	823462. 08	1000006. 40
30	1730. 70	1730. 96	100014. 98	823822. 14	823828. 65	1000006. 51
60. 0	1745. 24	1745. 51	100015. 23	824185. 53	824192. 15	1000006. 62

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tagente	Tomologarith. pro Secante
30.0	99996. 19	11458865. 01	11459301. 35	999998. 35	1205914. 16	1205915. 81
30	99996. 06	11271005. 11	11271448. 72	999998. 29	1205196. 27	1205197. 98
29.0	99995. 93	11089205. 20	11089656. 08	999998. 23	1204490. 04	1204491. 81
30	99995. 80	10913176. 44	10913693. 59	999998. 18	1203795. 12	1203796. 94
28.0	99995. 67	10742648. 44	10743113. 86	999998. 12	1203111. 14	1203113. 02
30	99995. 53	10577367. 31	10577840. 00	999998. 06	1202437. 76	1202439. 70
27.0	99995. 39	10417094. 44	10417574. 41	999998. 00	1201774. 66	1201776. 66
30	99995. 25	10261605. 79	10262093. 04	999997. 94	1201121. 54	1201123. 60
26.0	99995. 11	10110690. 30	10111184. 81	999997. 88	1200478. 08	1200480. 20
30	99994. 96	9964148. 91	9964650. 70	999997. 81	1199844. 02	1199846. 21
25. 0	99994. 82	9821794. 28	9822303. 34	999997. 75	1199219. 08	1199221. 33
30	99994. 67	9683449. 48	9683965. 81	999997. 68	1198603. 01	1198605. 33
24. 0	99994. 52	9548947. 53	9549471. 14	999997. 62	1197995. 55	1197997. 93
30	99994. 36	9418130. 42	9418661. 29	999997. 55	1197396. 47	1197398. 92
23. 0	99994. 21	9290848. 75	9291386. 90	999997. 48	1196805. 53	1196808. 05
30	99994. 05	9166961. 10	9167506. 52	999997. 42	1196222. 65	1196225. 23
22. 0	99993. 89	9046333. 59	9046886. 28	999997. 35	1195647. 26	1195649. 91
30	99993. 73	8928839. 11	8929399. 07	999997. 28	1195079. 50	1195082. 22
21. 0	99993. 57	8814357. 15	8814924. 39	999997. 21	1194519. 07	1194521. 86
30	99993. 40	8702773. 39	8703347. 90	999997. 13	1193965. 77	1193968. 64
20. 0	99993. 23	8593979. 07	8594560. 86	999997. 06	1193419. 43	1193422. 37
30	99993. 06	8487870. 95	8488460. 01	999996. 98	1192879. 87	1192882. 89
19. 0	99992. 85	8384350. 69	8384947. 01	999996. 91	1192346. 94	1192350. 03
30	99992. 71	8283324. 80	8283928. 40	999996. 83	1191820. 46	1191823. 63
18. 0	99992. 54	8184704. 14	8185315. 01	999996. 76	1191300. 30	1191303. 54
30	99992. 36	8088403. 87	8089022. 02	999996. 68	1190786. 28	1190789. 60
17. 0	99992. 18	7994343. 00	7994968. 41	999996. 60	1190278. 28	1190781. 68
30	99991. 99	7902444. 35	7903077. 04	999996. 52	1189776. 14	1189779. 62
16. 0	99991. 81	7812634. 22	7813274. 19	999996. 44	1189279. 75	1189283. 31
30	99991. 62	7724842. 15	7725489. 38	999996. 36	1188788. 96	1188792. 60
15. 0	99991. 43	7639000. 91	7639655. 42	999996. 28	1188303. 66	1188307. 38
30	99991. 24	7555046. 21	7555707. 99	999996. 20	1187823. 72	1187827. 52
14. 0	99991. 05	7472916. 51	7473585. 56	999996. 11	1187349. 01	1187352. 90
30	99990. 85	7392552. 95	7393229. 27	999996. 03	1186879. 45	1186883. 42
13. 0	99990. 65	7313899. 10	7314582. 70	999995. 94	1186414. 90	1186418. 96
30	99990. 45	7236901. 03	7237591. 90	999995. 85	1185955. 26	1185959. 41
12. 0	99990. 25	7161507. 03	7162205. 18	999995. 77	1185500. 45	1185504. 68
30	99990. 05	7087667. 41	7088372. 82	999995. 68	1185050. 34	1185054. 66
11. 0	99989. 84	7015334. 61	7016047. 30	999995. 59	1184604. 84	1184609. 25
30	99989. 63	6944462. 99	6945182. 95	999995. 50	1184163. 87	1184168. 37
10. 0	99989. 42	6875008. 75	6875735. 98	999995. 41	1183727. 33	1183731. 92
30	99989. 21	6806929. 69	6807664. 19	999995. 31	1183295. 13	1183299. 82
9. 0	99989. 00	6740185. 41	6740927. 19	999995. 22	1182867. 18	1182871. 96
30	99988. 78	6674737. 09	6675486. 14	999995. 13	1182443. 42	1182448. 29
8. 0	99988. 56	6610547. 29	6611303. 61	999995. 03	1182023. 74	1182028. 71
30	99988. 34	6547580. 04	6548343. 64	999994. 93	1181608. 08	1181613. 15
7. 0	99988. 12	6485800. 76	6486571. 63	999994. 84	1181196. 36	1181201. 52
30	99987. 89	6425176. 13	6425954. 28	999994. 74	1180728. 51	1180793. 77
6. 0	99987. 66	6365674. 12	6366459. 54	999994. 64	1180384. 44	1180389. 80
30	99987. 43	6307263. 79	6308056. 47	999994. 54	1179984. 10	1179989. 56
5. 0	99987. 20	6249915. 36	6250715. 32	999994. 44	1179587. 41	1179592. 97
30	99986. 97	6193600. 17	6194407. 40	999994. 34	1179194. 32	1179199. 98
4. 0	99986. 73	6138290. 51	6139105. 01	999994 24	1178804. 75	1178810. 51
30	99986. 49	6083959. 71	6084781. 49	999994. 13	1178418. 63	1178424. 50
3. 0	99986. 25	6030581. 98	6031411. 03	999994. 03	1178035. 92	1178041. 89
30	99986. 01	5978132. 50	5978968. 82	999993. 92	1177656. 55	1177662. 63
2. 0	99985. 77	5926587. 21	5927430. 81	999993. 82	1177280. 47	1177286. 65
30	99985. 52	5875922. 97	5876773. 84	999993. 71	1176907. 61	1176913. 90
1. 0	99985. 27	5826117. 35	5826975. 49	999993. 60	1176537. 92	1176544. 32
30	99985. 02	5777148. 73	5778014. 14	999993. 49	1176171. 35	1176177. 86
0. 0	99984. 77	5728996. 17	5729868. 86	999993. 38	1175807. 85	1175814. 47

I	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0	1745. 24	1745. 51	100015. 23	824185. 53	824192. 15	1000006. 62
1	1774. 32	1774. 60	100015. 74	824903. 32	824910. 15	1000006. 84
2	1803. 41	1803. 70	100016. 26	825609. 43	825616. 40	1000007. 06
3	1832. 49	1832. 80	100016. 79	826304. 23	826311. 53	1000007. 29
4	1861. 58	1861. 90	100017. 33	826988. 10	826995. 63	1000007. 53
5	1890. 66	1891 00	100017. 88	827661. 36	827669. 12	1000007. 76
6	1919. 74	4920. 10	100018. 43	828324. 34	828332. 34	1000008. 00
7	1948. 83	1949. 20	100018. 99	828977. 34	828985. 59	1000008. 25
8	1977. 91	1978. 30	100019 56	829620. 67	829629. 17	1000008. 50
9	2006. 99	2007. 40	100020. 14	830254. 60	830263. 35	1000008. 75
10	2036. 08	2036. 50	100020. 73	830879. 41	830888. 42	1000009. 00
11	2065. 16	2065. 60	100021. 33	831495. 36	831504 62	1000009. 26
12	2094. 24	2094. 70	100021. 94	832102. 69	832112. 21	1000009. 53
13	2123. 32	2123. 80	100022. 55	832701. 63	832711. 43	1000009. 79
14	2152. 41	2152. 91	100023. 17	833292. 43	833302. 40	1000010. 06
15	2181. 49	2182. 01	100023. 80	833875. 29	833885. 63	1000010. 34
16	2210. 57	2211. 11	100024. 44	834450. 43	834461. 05	1000010. 61
17	2239. 65	2240. 21	100025. 09	835018. 05	835028. 95	1000010. 89
18	2268. 73	2269. 32	100025. 75	835578. 35	835589. 53	1000011. 18
19	2297. 81	2298. 42	100026. 41	836131. 50	836142. 97	1000011. 47
20	2326. 90	2327. 53	100027. 08	836677. 69	836689. 45	1000011. 76
21	2355. 98	2356. 63	100027. 76	837217. 10	837229. 15	1000012. 06
22	2385. 06	2385. 74	100028. 45	837749. 88	837762. 23	1000012. 36
23	2414. 14	2414. 84	100029. 15	838276. 20	838288. 86	1000012. 66
24	2443. 22	2443. 95	100029. 86	838796. 22	838809. 18	1000012. 97
25	2472. 30	2473. 05	100030. 58	839310. 08	839323. 36	1000013. 28
26	2501. 38	2502. 16	100031. 30	839817. 93	839831. 52	1000013. 59
27	2530. 46	2531. 27	100032. 03	840319. 90	840333. 81	1000013. 91
28	2559. 54	2560. 38	100032. 77	840816. 14	840830. 37	1000014. 23
29	2588. 62	2589. 48	100033. 52	841306. 76	841321. 32	1000014. 56
30	2617. 69	2618. 59	100034. 28	841791. 90	841806. 79	1000014. 88
31	2646. 77	2647. 70	100035. 05	842271. 68	842286. 90	1000015. 22
32	2675. 85	2676. 81	100035. 82	842746. 21	842761. 76	1000015 55
33	2704. 93	2705. 92	100036. 60	843215. 61	843231. 50	1000015. 89
34	2734. 01	2735. 03	100037. 39	843679. 99	843696. 22	1000016. 24
35	2763. 09	2764. 14	100038. 19	844139. 44	844156. 03	1000016. 58
36	2792. 16	2793. 25	100039. 00	844594. 09	844611. 03	1000016. 94
37	2821. 24	2822. 36	100039. 82	845044. 02	845061. 31	1000017. 29
38	2850. 30	2851. 48	100040. 65	845489. 24	845506. 99	1000017. 65
39	2879. 40	2880. 59	100041. 48	845930. 13	845948. 14	1000018. 01
40	2908. 47	2909. 70	100042. 32	846366. 49	846384. 86	1000018. 38
41	2937. 55	2938. 82	100043. 17	846798. 50	846817. 25	1000018. 75
42	2966. 62	2967. 93	100044. 03	847226. 26	847245. 38	1000019. 12
43	2995. 70	2997. 05	100044. 90	847649. 84	847669. 33	1000019. 50
44	3024. 78	3026. 16	100045. 78	848069. 32	848089. 20	1000019. 88
45	3053. 85	3055. 28	100046. 67	848484. 79	848505. 05	1000020. 26
46	3082. 93	3084. 39	100047. 56	848896. 32	848916. 96	1000020. 65
47	3112. 00	3113. 51	100048. 46	849303. 98	849325. 02	1000021. 04
48	3141. 08	3142. 63	100049. 37	849707. 84	849729. 28	1000021. 44
49	3170. 15	3171. 74	100050. 29	850107. 98	850129. 82	1000021. 83
50	3199. 22	3200. 86	100051. 22	850504. 47	850526. 71	1000022. 24
51	3228. 30	3229. 98	100052. 15	850897. 36	850920. 01	1000022. 64
52	3257. 37	3259. 10	100053. 09	851286. 73	851309. 78	1000023. 05
53	3286. 44	3288. 22	100054. 05	851672. 64	851696. 10	1000023. 47
54	3315. 52	3317. 34	100055. 01	852055. 14	852079. 02	1000023. 88
55	3344. 59	3346. 46	100055. 98	852434. 30	852458. 60	1000024. 30
56	3373. 66	3375. 58	100056. 96	852810. 17	852834. 90	1000024. 73
57	3402. 73	3404. 71	100057. 95	853182. 81	853207. 97	1000025. 16
58	3431. 81	3433. 83	100058. 94	853552. 28	853577. 87	1000025. 59
59	3460. 88	3462. 95	100059. 94	853918. 63	853944. 66	1000026. 02
60	3489. 95	3492. 08	100060. 95	854281. 92	854308. 38	1000026. 46

′	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tagente	Tomologarith. pro Secante
60	99984. 77	5728996. 16	5729868. 85	999993. 38	1175807. 85	1175814. 47
59	99984. 26	5635058. 96	5635946. 29	999993. 16	1175089. 85	1175036. 68
58	99983. 74	5544151. 67	5545053. 45	999992. 94	1174383. 51	1174390. 57
57	99983. 21	5456130. 03	5457046. 35	999992 71	1173688. 47	1173695. 76
56	99982. 67	5370858. 75	5371789. 62	999992. 47	1173004. 37	1173011. 90
55	99982. 12	5288210. 91	5289156. 37	999992. 24	1172330. 88	1172338. 64
54	99981. 57	5208067. 26	5209027. 22	999992. 00	1171667. 66	1171675. 66
53	99981. 01	5130315. 66	5131290. 17	999991. 75	1171014. 41	1171022. 66
52	99980. 44	5054850. 59	5055839. 65	999991. 50	1170370. 83	1170379. 33
51	99979. 86	4981572. 64	4982576. 23	999991. 25	1169736. 65	1169745. 40
50	99979. 27	4910388. 06	4911406. 20	999991. 00	1169111. 58	1169120. 59
49	99978. 67	4841208. 41	4842241. 10	999990. 74	1168495. 38	1168504. 64
48	99978. 06	4773950. 14	4774997. 38	999990. 47	1167887. 79	1167897. 31
47	99977. 45	4708534. 30	4709596. 08	999990. 21	1167288. 57	1167298. 37
46	99976. 83	4644886. 20	4645962. 53	999989. 94	1166697. 51	1166707. 57
45	99976. 20	4582935. 12	4584025. 99	999989. 66	1166114. 37	1166124. 71
44	99975. 56	4522614. 07	4523719. 49	999989. 39	1165538. 95	1165549. 57
43	99974. 91	4463859. 56	4464979. 52	999989. 11	1164971. 05	1164981. 95
42	99974. 25	4406611. 32	4407745. 83	999988. 82	1164410. 47	1164421. 65
41	99973. 59	4350812. 16	4351961. 22	999988. 53	1163857. 03	1163868. 50
40	99972. 92	4296407. 73	4297571. 34	999988. 24	1163310. 55	1163322. 31
3	99972. 24	4243346. 39	4244524. 54	999987. 94	1162770. 85	1162782. 90
38	99971. 55	4191578. 99	4192771. 68	999987. 64	1162237. 77	1162250. 12
37	99970. 85	4141058. 76	4142266. 00	999987. 34	1161711. 14	1161723. 80
36	99970. 14	4091741. 16	4092962. 95	999987. 03	1161190. 82	1161203. 78
35	99969. 43	4043583. 75	4044820. 09	999986. 72	1160676. 64	1160689. 92
34	99968. 71	3996546. 05	3997796. 94	999986. 41	1160168. 48	1160182. 07
33	99967. 98	3950589. 46	3951854. 89	9999 6. 09	1159666. 19	1159680. 10
32	99967. 24	3905677. 11	3906957. 09	999985. 77	1159169. 63	1159183. 86
31	99966. 49	3861773. 81	3863068. 34	999985. 44	1158678. 68	1158693. 24
30	99965. 73	3818845. 93	3820155. 00	999985. 12	1158193. 21	1158208. 10
29	99964. 96	3776861. 30	3778184. 92	999984. 78	1157713. 10	1157728. 32
28	99964. 19	3735789. 17	3737127. 34	999984. 45	1157238. 24	1157253. 79
27	99963. 41	3695600. 11	3696952. 82	999984. 11	1156768. 50	1156784. 39
26	99962. 62	3656265. 92	3657633. 18	999983. 76	1156303. 78	1156320. 01
25	99961. 82	3617759. 62	3619141. 43	999983. 42	1155843. 97	1155860. 56
24	99961. 01	3580055. 33	3581451. 68	999983. 06	1155388. 97	1155405. 91
23	99960. 19	3543128. 25	3544539. 15	999982. 71	1154938. 69	1154955. 98
22	99959. 36	3506954. 58	3508380. 03	999982. 35	1154493. 01	1154510. 66
21	99958. 53	3471511. 50	3472951. 50	999981. 99	1154051. 86	1154069. 87
20	99957. 69	3436777. 09	3438231. 63	999981. 62	1153615. 14	1153633. 51
19	99956. 84	3402730. 29	3404199. 39	999981. 25	1153182. 75	1153201. 50
18	99955. 98	3369350. 89	3370834. 53	999980. 88	1152754. 62	1152773. 74
17	99955. 11	3336619. 45	3338117. 63	999980. 50	1152330. 67	1152350. 16
16	99954. 24	3304517. 27	3306030. 00	999980. 12	1151910. 80	1151930 68
15	99953. 36	3273026. 37	3274553. 65	999979. 74	1151494. 95	1151515. 21
14	99952. 47	3242129. 46	3243671. 29	999979. 35	1151083. 04	1151103. 68
13	99951. 57	3211809. 88	3213366. 26	999978. 96	1150674. 98	1150696. 02
12	99950. 66	3182051. 60	3183622. 52	999978. 56	1150270. 72	1150292. 16
11	99949. 74	3152839. 16	3154424. 63	999978. 17	1149870. 18	1149892. 02
10	99948. 81	3124157. 67	3125757. 70	999977. 76	1149473. 29	1149495. 53
9	99947. 88	3095992. 80	3097607. 37	999977. 36	1149079. 99	1149102. 64
8	99946. 94	3068330. 70	3069959. 82	999976. 95	1148690. 22	1148713. 27
7	99945. 99	3041158 02	3042801 69	999976. 53	1148303. 90	1148327. 36
6	99945. 03	3014461. 89	3016120. 10	999976. 12	1147920. 98	1147944. 86
5	99944. 06	2988220. 86	2989902. 63	999975. 70	1147541. 40	1147565. 70
4	99943. 08	2962449. 05	2964137. 26	999975. 27	1147165. 10	1147189. 83
3	99942. 09	2937110. 55	2938812. 41	999974. 84	1146792. 03	1146817. 19
2	99941. 09	2912200. 47	2913916. 88	999974. 41	1146422. 13	1146447. 72
1	99940. 09	2887708. 88	2889439. 84	999973. 98	1146055. 34	1146081. 37
0	99939. 08	2863625. 33	2865370. 83	999973. 54	1145691. 62	1145718. 08

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0	3489.95	3492.08	100060.95	854281.92	854308.38	1000026.46
1	3519.02	3521.20	100061.97	854642.18	854669.09	1000026.91
2	3548.09	3550.33	100063.00	854999.48	855026.83	1000027.35
3	3577.16	3579.45	100064.04	855353.86	855381.66	1000027.80
4	3606.23	3608.58	100065.09	855705.36	855733.62	1000028.26
5	3635.30	3637.71	100066.15	856054.04	856082.76	1000028.72
6	3664.37	3666.83	100067.21	856399.94	856429.12	1000029.18
7	3693.44	3695.96	100068.28	856743.10	856772.75	1000029.64
8	3722.51	3725.09	100069.36	857083.57	857113.68	1000030.11
9	3751.58	3754.22	100070.45	857421.39	857451.97	1000030.58
10	3780.65	3783.35	100071.55	857756.60	857787.66	1000031.06
11	3809.71	3812.48	100072.66	858089.23	858120.77	1000031.54
12	3838.78	3841.61	100073.77	858419.33	858451.36	1000032.02
13	3867.85	3870.74	100074.89	858746.94	858779.45	1000032.51
14	2896.91	3899.88	100076.02	859072.09	859105.09	1000033.00
15	3925.98	3929.01	100077.16	859394.83	859428.32	1000033.50
16	3955.05	3958.14	100078.31	859715.17	859749.17	1000033.99
17	3984.11	3987.28	100079.47	860033.17	860067.67	1000034.50
18	4013 18	4016.41	100080.63	860348.86	860383.86	1000035.00
19	4042.24	4045.55	100081.80	860662.26	860697.77	1000035.51
20	4071.31	4074.69	100082.98	860973.41	861009.43	1000036.02
21	4100.37	4103.83	100084.17	861282.35	861318.89	1000036.54
22	4129.44	4132.96	100085.37	861589.10	861626.16	1000037.06
23	4158.50	4162.10	100086.58	861893.69	861931.27	1000037.58
24	4187.57	4191.24	100087.80	862196.16	862234.27	1000038.11
25	4216.63	4220.38	100089.02	862496.53	862535.18	1000038.64
26	4245.69	4249.52	100090.25	862794.84	862834.02	1000039.18
27	4274.75	4278.66	100091.49	863091.11	863130.83	1000039.72
28	4303.82	4307.81	100092.74	863385.37	863425.63	1000040.26
29	4332.88	4336.95	100094.00	863677.64	863718.45	1000040.81
30	4361.94	4366.09	100095.27	863967.96	864009.31	1000041.35
31	4391.00	4395.24	100096.55	864256.34	864298.25	1000041.91
32	4420.06	4424.38	100097.83	864542.82	864585.28	1000042.47
33	4449.12	4453.53	100099.12	864827.42	864870.44	1000043.03
34	4478.18	4482.68	100100.42	865110.16	865153.75	1000043.59
35	4507.24	4511.82	100101.73	865391.07	865435.22	1000044.16
36	4536 30	4540.97	100103.05	865670.17	865714.90	1000044.73
37	4565.36	4570.12	100104.38	865947.48	865992.79	1000045.31
38	4594.42	4599.27	100105.71	866223.03	866268.91	1000045.89
39	4623.47	4628.42	100107.05	866496.84	866543.31	1000046.47
40	4652.53	4657.57	100108.40	866768.93	866815.98	1000047.05
41	4681.59	4686.73	100109.76	867039.32	867086.97	1000047.64
42	4710.64	4715.88	100111.13	867308.04	867356.28	1000048.24
43	4739.70	4745.03	100112.51	867575.10	867623.93	1000048.84
44	4768.76	4774.19	100113.90	867840.52	867889.96	1000049.44
45	4797 81	4803.34	100115.30	868104.33	868154.37	1000050.04
46	4826.87	4832.50	100116.70	868366.54	868417.19	1000050.65
47	4855.92	4861.66	100118.11	868627.18	868678.44	1000051.26
48	4884.98	4890 82	100119.53	868886.25	868938.13	1000051.88
49	4914 03	4919.97	100120.96	869143.79	869196.29	1000052.50
50	4943.08	4949.13	100122.40	869399.80	869452.92	1000053.12
51	4972.14	4978.29	100123.85	869654.31	869708.06	1000053.75
52	5001.19	5007.46	100125.30	869907.34	869961.72	1000054.38
53	5030.24	5036.63	100126.76	870158.89	870213.00	1000055.02
54	5059.29	5065.78	100128.23	870408.99	870464.65	1000055.65
55	5088.35	5094.95	100129.71	870657.66	870713.95	1000056.30
56	5117.40	5124.11	100131.20	870904.00	870961.85	1000056.94
57	5146.45	5153.28	100132.70	871150.75	871208.34	1000057.59
58	5175.50	5182.44	100134.20	871395.20	871453.45	1000058.24
59	5204.55	5211.61	100135.71	871638.29	871697.19	1000058.90
60	5233.60	5240.78	100137.23	871880.02	871939.57	1000059.56

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
60	99939.08	2863625.33	2865370.83	999973.54	1145691.62	1145718.08
59	99938.06	2839939.69	2841699.74	999973.09	1145330.91	1145357.82
58	99937.03	2816642.18	2818416.78	999972.65	1144973.17	1145000.52
57	99935.99	2793723.33	2795512.48	999972.20	1144618.34	1144646.14
56	99934.95	2771173.99	2772977.69	999971.74	1144266.38	1144294.64
55	99933.90	2748985.28	2750803.53	999971.28	1143917.24	1143945.96
54	99932.84	2727148.61	2728981.41	999970.82	1143570.88	1143600.66
53	99931.77	2705655.68	2707503.03	999970.36	1143227.25	1143256.90
52	99930.69	2684498.43	2686360.33	999969.89	1142886.32	1142916.43
51	99929.60	2663669.04	2665545.49	999969.42	1142548.03	1142578.61
50	99928.51	2643159.96	2645050.96	999968.94	1142212.34	1142243.40
49	99927.40	2622963.84	2624869.39	999968.46	1141879.23	1141910.77
48	99926.29	2603073.58	2604993.68	999967.98	1141548.64	1141580.67
47	99925.17	2583482.27	2585416.92	999967.49	1141220.55	1141253.06
46	99924.04	2564183.23	2566132.43	999967.00	1140894.91	1140927.91
45	99922.90	2545169.96	2547133.71	999966.50	1140571.68	1140605.17
44	99921.75	2526436.15	2528414.45	999966.01	1140250.83	1140284.83
43	99920.60	2507975.68	2509968.53	999965.50	1139932.33	1139966.83
42	99919.44	2489782.62	2491790.02	999965.00	1139616.14	1139651.14
41	99918.27	2471851.19	2473873.14	999964.49	1139302.23	1139337.74
40	99917.09	2454175.78	2456212.28	999963.98	1138990.57	1139026.59
39	99915.90	2436750.95	2438802.00	999963.46	1138681.11	1138717.65
38	99914.70	2419571.40	2421637.00	999962.94	1138373.84	1138410.90
37	99913.49	2402631.99	2404712.14	999962.42	1138068.73	1138106.31
36	99912.28	2385927.72	2388022.42	999961.89	1137765.73	1137803.84
35	99911.06	2369453.72	2371562.97	999961.36	1137464.82	1137503.47
34	99909.83	2353205.25	2355329.05	999960.82	1137165.98	1137205.16
33	99908.59	2337177.72	2339316.07	999960.28	1136869.17	1136908.89
32	99907.34	2321366.65	2323519.55	999959.74	1136574.37	1136614.63
31	99906.08	2305767.67	2307935.13	999959.19	1136281.55	1136322.36
30	99904.82	2290376.55	2292558.56	999958.65	1135990.69	1136032.04
29	99903.55	2275189.16	2277385.72	999958.09	1135701.75	1135743.66
28	99902.27	2260201.48	2262412.59	999957.53	1135414.72	1135457.18
27	99900.98	2245409.59	2247635.25	999956.97	1135129.56	1135172.58
26	99899.68	2230809.67	2233049.89	999956.41	1134846.25	1134889.84
25	99898.37	2216398.02	2218652.78	999955.84	1134564.78	1134608.93
24	99897.05	2202171.00	2204440.32	999955.27	1134285.10	1134329.83
23	99895.73	2188125.10	2190408.97	999954.69	1134007.21	1134052.52
22	99894.40	2174256.87	2176555.29	999954.11	1133731.09	1133776.97
21	99893.06	2160562.96	2162875.93	999953.53	1133456.69	1133503.16
20	99891.71	2147040.10	2149367.63	999952.95	1133184.02	1133231.07
19	99890.35	2133685.11	2136027.19	999952.36	1132913.03	1132960.68
18	99888.98	2120494.88	2122851.51	999951.76	1132643.72	1132691.96
17	99887.61	2107466.37	2109837.55	999951.16	1132376.07	1132424.90
16	99886.23	2094596.63	2096982.36	999950.56	1132110.04	1132159.48
15	99884.84	2081882.76	2084283.05	999949.96	1131845.63	1131895.67
14	99883.44	2069321.96	2071736.80	999949.35	1131582.81	1131633.46
13	99882.03	2056911.47	2059342.86	999948.74	1131321.56	1131372.82
12	99880.61	2044648.61	2047092.55	999948.12	1131061.87	1131113.75
11	99879.18	2032530.75	2034989.25	999947.50	1130803.71	1130856.21
10	99877.75	2020555.35	2033028.40	999946.88	1130547.08	1130600.20
9	99876.31	2008719.89	2011207.50	999946.25	1130291.94	1130345.69
8	99874.86	1997021.95	1999524.11	999945.62	1130038.28	1130092.66
7	99873.40	1985459.12	1987975.84	999944.98	1129786.10	1129841.11
6	99871.93	1974029.10	1976560.36	999944.35	1129535.35	1129591.01
5	99870.45	1962729.59	1965275.41	999943.70	1129286.05	1129342.34
4	99868.97	1951558.37	1954118.74	999943.06	1129038.15	1129095.10
3	99867.48	1940513.27	1943088.20	999942.41	1128791.66	1128849.25
2	99865.98	1929592.17	1932181.65	999941.76	1128546.55	1128604.80
1	99864.47	1918792.98	1921397.01	999941.10	1128302.81	1128361.71
0	99862.95	1908113.67	1910732.26	999940.44	1128060.42	1128119.98

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tagente	Tomologarith. pro Secante
0	5233.60	5240.78	100137.23	871880.02	871939.58	1000059.56
1	5262.64	5269 95	100138.76	872120.40	872180.63	1000060.22
2	5291.69	5299. 12	100140.30	872359.46	872420.35	1000060.89
3	5320.74	5328.29	100141.85	872597.21	872658.77	1000061.56
4	5349.79	5357.46	100143.41	872833.66	872895.89	1000062.24
5	5378.83	5386.63	100144.98	873068.82	873131.74	1000062.92
6	5407.88	5415.81	100146.55	873302.72	873366.31	1000063.60
7	5436.93	5444.98	100148.13	873535.35	873599.64	1000064.28
8	5465.97	5474.16	100149.72	873766.75	873831.72	1000064.97
9	5495.02	5503.33	100151.32	873996.91	874062.58	1000065.67
10	5524.06	5532.51	100152.93	874225.86	874292.22	1000066.36
11	5553.11	5561.69	100154.55	874453.60	874520.67	1000067.07
12	5582.15	5590.87	100156.17	874680.15	874747.92	1000067.77
13	5611.19	5620.05	100157.80	874905.53	874974.05	1000068.48
14	5640.24	5649.23	100159.44	875129.73	875198.92	1000069.19
15	5669.28	5678.41	100161.09	875352.78	875422.65	1000069.91
16	5698.32	5707.59	100162.75	875574.69	875645.31	1000070.62
17	5727.36	5736.78	100164.42	875795.46	875866.81	1000071.35
18	5756.40	5765.96	100166.10	876015.12	876087.19	1000072.07
19	5785.44	5795.15	100167.78	876233.66	876306.47	1000072.80
20	5814.48	5824.34	100169.47	876451.11	876524.65	1000073.54
21	5843.52	5853.52	100171.17	876667.47	876741.75	1000074.28
22	5872.56	5882.71	100172.88	876882.75	876957.77	1000075.02
23	5901.60	5911.90	100174 60	877096.97	877172.74	1000075.76
24	5930.64	5941.09	100176.33	877310 14	877386.65	1000076.51
25	5959.67	5970.29	100178 07	877522.26	877599.52	1000077.26
26	5988.71	5999.48	100179.81	877733.34	877811.36	1000078.02
27	6017.75	6028.67	100181.56	877943.40	878022.18	1000078.78
28	6046.78	6057.87	100183.32	878152.44	878231.99	1000079.54
29	6075.82	6087.06	100185.09	878360.48	878440.79	1000080.31
30	6104.85	6116.26	100186.87	878567.53	878648.61	1000081.08
31	6133.89	6145.46	100188.66	878773.59	878855.44	1000081.85
32	6162.92	6174.66	100190.46	878978.67	879061.30	1000082.63
33	6191.96	6203.86	100192.26	879182.78	879266.20	1000083.41
34	6220.99	6233.06	100194.07	879385.94	879470.14	1000084.20
35	6250.02	6262.26	100195.89	879588.14	879673.13	1000084.99
36	6279 05	6291.47	100197.72	879789 41	879875.19	1000085.78
37	6308.08	6320.67	100199.56	879989.74	880076.32	1000086.58
38	6337.11	6349.88	100201.41	880189.15	880276.53	1000087.38
39	6366.14	6379.08	100203.26	880387.64	880475.83	1000088.18
40	6395.17	6408.29	100205.12	880585.23	880674.22	1000088.99
41	6424.20	6437.50	100206.99	880781 92	880871.72	1000089.80
42	6453.23	6466.71	100208.87	880977.72	881068.34	1000090.62
43	6482.26	6495.92	100210.76	881172.64	881264.07	1000091.44
44	6511.29	6525.13	100212 66	881366.68	881458.94	1000092.26
45	6540.31	6554.35	100214.57	881559.85	881652.94	1000093.09
46	6569.34	6583.56	100216.49	881752.17	881846.08	1000093.92
47	6598.36	6612.78	100218.41	881943.63	882038.38	1000094.75
48	6627.39	6641.99	100420.34	882134.25	882229.84	1000095.59
49	6656.41	6671.21	100222.28	882324.04	882420 46	1000096.43
50	6685.44	6700.43	100224.23	882512.99	882610.26	1000097.27
51	6714.46	6729.65	100226.19	882701.12	882799.24	1000098.12
52	6743.48	6758.87	100228.16	882888.44	882987.41	1000098.97
53	6772.51	6788.09	100230.13	883074.95	883174.78	1000099.83
54	6801.53	6817.32	100232.11	883260.66	883361.34	1000100.69
55	6830.55	6846.54	100234.10	883445.57	883547.12	1000101.55
56	6859.57	6875.77	100236.10	883629.69	883732.11	1000102.42
57	6888.59	6904.99	100238.11	883813.04	883916.33	1000103.29
58	6917.61	6934.22	100240.13	883995.61	884099.77	1000104.16
59	6946.63	6963.45	100242.16	884177.41	884282.45	1000105.04
60	6975.65	6992.68	100244.19	884358.45	884464.37	1000105.92

′	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
60	99862.95	1908113.67	1910732.26	999940.44	1128060.42	1128119.98
59	99861.42	1897552.26	1900185.40	999939.78	1127819.37	1127879.60
58	99859.89	1887106.83	1889754.50	999939.11	1127579.65	1127640.54
57	99858.35	1876775.39	1879437.65	999938.44	1127341.23	1127402.79
56	99856.80	1866556.18	1869232.93	999937.76	1127104.11	1127166.34
55	99855.24	1856447.34	1859138.71	999937.08	1126868.26	1126931.18
54	99853.67	1846447.09	1849153.01	999936.40	1126633.69	1126697.28
53	99852.09	1836553.70	1839274.17	999935.72	1126400.36	1126464.65
52	99850.50	1826765.44	1829500.48	999935.03	1126168.28	1126233.25
51	99848.91	1817080.67	1819830.26	999934.33	1125937.42	1126003.09
50	99847.31	1807497.74	1810261.88	999933.64	1125707.78	1125774.14
49	99845.70	1798015.05	1800793.75	999932.93	1125479.33	1125546.40
48	99844.08	1788631.04	1791424.29	999932.23	1125252.08	1125319.85
47	99842.45	1779344.17	1782151.98	999931.52	1125026.00	1125094.47
46	99840.81	1770152.94	1772975.31	999930.81	1124801.08	1124870.27
45	99839.16	1761055.88	1763892.80	999930.09	1124577.31	1124647.22
44	99837.51	1752051.55	1754903.03	999929.38	1124354.69	1124425.31
43	99835.85	1743138.54	1746004.57	999928.65	1124133.19	1124204.54
42	99834.18	1734315.46	1737196.05	999927.93	1123912.81	1123984.88
41	99832.50	1725580.95	1728476.10	999927.20	1123693.53	1123766.34
40	99830.81	1716933.69	1719843.40	999926.46	1123475.35	1123548.89
39	99829.11	1708372.38	1711296.64	999925.72	1123258.25	1123332.53
38	99827.41	1699895.74	1702834.56	999924.98	1123042.23	1123117.25
37	99825.70	1691502.51	1694455.89	999924.24	1122827.26	1122903.03
36	99823.98	1683191.48	1686159.41	999923.49	1122613.35	1122689.86
35	99822.25	1674961.44	1677943.92	999922.74	1122400.48	1122477.74
34	99820.51	1666811.20	1669808.25	999921.98	1122188.64	1122266.66
33	99818.76	1658739.62	1661751.22	999921.22	1121977.82	1122056.60
32	99817.01	1650745.55	1653771.71	999920.46	1121768.01	1121847.56
31	99815.25	1642827.89	1645808.61	999919.69	1121559.21	1121639.52
30	99813.48	1634985.55	1638040.82	999918.92	1121351.39	1121432.47
29	99811.70	1627217.44	1630287.28	999918.15	1121144.56	1121226.41
28	99809.91	1619522.53	1622606.93	999917.37	1120938.70	1121021.33
27	99808.11	1611899.79	1614998.74	999916.59	1120733.80	1120817.22
26	99806.30	1604348.19	1607461.70	999915.80	1120529.86	1120614.06
25	99804.49	1596866.74	1599994.81	999915.01	1120326.87	1120411.86
24	99802.67	1589454.48	1592597.11	999914.22	1120124.81	1120210.59
23	99800.84	1582110.45	1585267.64	999913.42	1119923.68	1120010.26
22	99799.00	1574833.71	1578005.45	999912.62	1119723.47	1119810.84
21	99797.15	1567623.33	1570809.63	999911.82	1119524.17	1119612.36
20	99795.29	1560478.41	1563679.27	999911.01	1119325.78	1119414.77
19	99793.43	1553398.06	1556613.48	999910.20	1119128.28	1119218.08
18	99791.56	1546381.41	1549611.39	999909.38	1118931.66	1119022.28
17	99789.68	1539427.60	1542672.15	999908.56	1118735.93	1118827.36
16	99787.79	1532535.80	1535794.90	999907.74	1118541.06	1118633.32
15	99785.89	1525705.17	1528978.83	999906.91	1118347.06	1118440.15
14	99783.98	1518934.90	1522223.12	999906.08	1118153.92	1118247.83
13	99782.06	1512224.20	1515526.98	999905.25	1117961.62	1118056.37
12	99780.14	1505572.27	1508889.61	999904.41	1117770.16	1117865.75
11	99778.21	1498978.36	1502310.26	999903.57	1117579.54	1117675.96
10	99776.27	1492441.70	1495788.16	999902.73	1117389.74	1117487.01
9	99774.32	1485961.55	1489322.58	999901.88	1117200.76	1117298.88
8	99772.36	1479537.18	1482912.77	999901.03	1117012.59	1117111.56
7	99770.39	1473167.87	1476558.02	999900.17	1116825.22	1116925.05
6	99768.42	1466852.02	1470257.63	999899.31	1116638.66	1116739.34
5	99766.44	1460591.63	1464010.90	999898.45	1116452.88	1116554.43
4	99764.45	1454383.32	1457817.15	999897.58	1116267.89	1116370.31
3	99762.45	1448227.32	1451676.71	999896.71	1116083.67	1116186.96
2	99760.44	1442122.07	1445585.02	999895.84	1115900.23	1116004.39
1	99758.42	1436069.61	1439547.1[illegible]	999894.96	1115717.55	1115822.59
0	99756.40	1430066.63	1433558.70	999894.08	1115535.63	1115641.55

4	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0	6975.65	6992.68	100244.19	884358.45	884464.37	1000105.92
1	7004.66	7021.91	100246.23	884538.74	884645.54	1000106.81
2	7033.68	7051.15	100248.28	884718.27	884825.97	1000107.70
3	7062.70	7080.38	100250.34	884897.07	885005.66	1000108.59
4	7091.71	7109.61	100252.41	885075.12	885184.61	1000109.48
5	7120.73	7138.85	100254.49	885252.45	885362.83	1000110.38
6	7149.74	7168.09	100256.58	885429.05	885540.34	1000111.29
7	7178.76	7197.33	100258.68	885604.93	885717.13	1000112.20
8	7207.77	7226.57	100260.78	885780.10	885893.21	1000113.11
9	7236.78	7255.81	100262.89	885954.57	886068.59	1000114.02
10	7265.80	7285.05	100265.01	886128.33	886243.27	1000114.94
11	7294.81	7314.30	100267.14	886301.39	886417.25	1000115.86
12	7323.82	7343.54	100269.28	886473.76	886590.55	1000116.79
13	7352.83	7372.79	100271.43	886645.45	886763.17	1000117.72
14	7381.84	7402.03	100273.58	886816.46	886935.11	1000118.65
15	7410.85	7431.28	100275.74	886986.80	887106.38	1000119.59
16	7439.86	7460.53	100277.91	887156.46	887276.99	1000120.53
17	7468.87	7489.79	100280.09	887325.46	887446.94	1000121.47
18	7497.87	7519.04	100282.28	887493.81	887616.23	1000122.42
19	7526.88	7548.29	100284.48	887661.50	887784.87	1000123.37
20	7555.89	7577.55	100286.68	887828.54	887952.86	1000124.33
21	7584.89	7606.80	100288.89	887994.93	888120.22	1000125.29
22	7613.90	7636.06	100291.11	888160.69	888286.94	1000126.25
23	7642.90	7665.32	100293.34	888325.81	888453.03	1000127.22
24	7671.90	7694.58	100295.58	888490.31	888618.50	1000128.19
25	7700.91	7723.84	100297.83	888654.18	888783.34	1000129.16
26	7729.91	7753.11	100300.09	888817.43	888947.57	1000130.14
27	7758.91	7782.37	100302.36	888980.07	889111.19	1000131.12
28	7787.91	7811.64	100304.64	889142.09	889274.20	1000132.10
29	7816.91	7840.90	100306.93	889303.51	889436.60	1000133.09
30	7845.91	7870.17	100309.22	889464.33	889598.42	1000134.09
31	7874.91	7899.44	100311.52	889624.55	889759.63	1000135.08
32	7903.91	7928.71	100313.83	889784.18	889920.26	1000136.08
33	7932.90	7957.98	100316.15	889943.22	890080.30	1000137.08
34	7961.90	7987.26	100318.48	890101.68	890239.77	1000138.09
35	7990.90	8016.53	100320.81	890259.55	890398.66	1000139.10
36	8019.89	8045.81	100323.15	890416.85	890556.97	1000140.12
37	8048.89	8075.09	100325.50	890573.58	890714.72	1000141.14
38	8077.88	8104.37	100327.86	890729.75	890871.90	1000142.16
39	8106.87	8133.65	100330.23	890885.35	891028.53	1000143.18
40	8135.87	8162.93	100332.61	891040.39	891184.60	1000144.21
41	8164.86	8192.21	100335.00	891194.87	891340.12	1000145.25
42	8193.85	8221.50	100337.40	891348.81	891495.09	1000146.28
43	8222.84	8250.78	100339.80	891502.19	891649.52	1000147.32
44	8251.83	8280.07	100342.21	891655.04	891803.40	1000148.37
45	8280.82	8309.36	100344.63	891807.34	891956.75	1000149.42
46	8309.81	8338.65	100347.06	891959.11	892109.57	1000150.47
47	8338.80	8367.94	100349.50	892110.34	892261.86	1000151.52
48	8367.78	8397.23	100351.95	892261.05	892413.63	1000152.58
49	8396.77	8426.53	100354.41	892411.23	892564.87	1000153.64
50	8425.76	8455.83	100356.87	892560.89	892715.60	1000154.71
51	8454.74	8485.12	100359.34	892710.03	892865.81	1000155.78
52	8483.73	8514.42	100361.82	892858.66	893015.52	1000156.85
53	8512.71	8543.72	100364.31	893006.78	893164.71	1000157.93
54	8541.69	8573.02	100366.81	893154.39	893313.40	1000159.01
55	8570.67	8602.33	100369.32	893301.50	893461.60	1000160.10
56	8599.66	8631.63	100371.84	893448.11	893609.29	1000161.19
57	8628.64	8660.94	100374.36	893594.22	893756.50	1000162.28
58	8657.62	8690.25	100376.89	893739.83	893903.21	1000163.37
59	8686.60	8719.56	100379.43	893884.96	894049.44	1000164.47
60	8715.57	8748.87	100381.98	894029.60	894195.18	1000165.58

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
60	99756.40	1430066.63	1433558.70	999894.08	1115535.63	1115641.55
59	99754.37	1424113.37	1427620.01	999893.19	1115354.46	1115461.26
58	99752.33	1418209.24	1421730.45	999892.30	1115174.03	1115281.73
57	99750.28	1412353.63	1415889.39	999891.41	1114994.34	1115102.93
56	99748.22	1406545.93	1410096.25	999890.52	1114815.39	1114924.88
55	99746.15	1400785.56	1404350.45	999889.62	1114637.17	1114747.55
54	99744.07	1395071.94	1398651.39	999888.71	1114459.66	1114570.95
53	99741.99	1389404.51	1392998.52	999887.80	1114282.87	1114395.07
52	99739.90	1383782.70	1387391.28	999886.89	1114106.79	1114219.90
51	99737.80	1378205.98	1381829.12	999885.98	1113931.41	1114045.43
50	99735.69	1372673.79	1376311.40	999885.06	1113756.73	1113871.67
49	99733.57	1367185.60	1370837.87	999884.14	1113582.75	1113698.61
48	99731.44	1361740.89	1365407.72	999883.21	1113409.45	1113526.24
47	99729.31	1356339.15	1360020.54	999882.28	1113236.83	1113354.55
46	99727.17	1350979.86	1354675.82	999881.35	1113064.89	1113183.54
45	99725.02	1345662.53	1349373.06	999880.41	1112893.62	1113013.20
44	99722.86	1340386.67	1344111.76	999879.47	1112723.01	1112843.54
43	99720.69	1335151.79	1338891.44	999878.53	1112553.06	1112674.54
42	99718.51	1329957.41	1333711.63	999877.58	1112383.77	1112506.19
41	99716.32	1324803.07	1328571.86	999876.63	1112215.13	1112338.50
40	99714.13	1319688.30	1323471.65	999875.67	1112047.14	1112171.46
39	99711.93	1314612.66	1318410.57	999874.71	1111879.78	1112005.07
38	99709.72	1309575.68	1313388.16	999873.75	1111713.06	1111839.31
37	99707.50	1304576.93	1308403.98	999872.78	1111546.97	1111674.19
36	99705.27	1299615.98	1303457.60	999871.81	1111381.50	1111509.69
35	99703.03	1294692.40	1298548.58	999870.84	1111216.66	1111345.82
34	99700.79	1289805.77	1293676.51	999869.86	1111052.43	1111182.57
33	99698.54	1284955.66	1288840.97	999868.88	1110888.81	1111019.93
32	99696.28	1280141.68	1284041.55	999867.90	1110725.80	1110857.91
31	99694.01	1275363.41	1279277.86	999866.91	1110563.40	1110696.49
30	99691.73	1270620.47	1274549.48	999865.91	1110401.58	1110535.67
29	99689.44	1265912.46	1269856.04	999864.92	1110240.37	1110375.45
28	99687.15	1261239.00	1265197.15	999863.92	1110079.74	1110215.82
27	99684.85	1256599.71	1260572.42	999862.92	1109919.70	1110056.78
26	99682.54	1251994.20	1255981.48	999861.91	1109760.23	1109898.32
25	99680.22	1247422.12	1251423.97	999860.90	1109601.34	1109740.45
24	99677.89	1242883.10	1246899.52	999859.88	1109443.03	1109583.15
23	99675.55	1238376.79	1242407.77	999858.86	1109285.28	1109426.42
22	99673.20	1233902.82	1237948.37	999857.84	1109128.10	1109270.25
21	99670.85	1229460.85	1233520.97	999856.82	1108971.47	1109114.65
20	99668.49	1225050.55	1229125.23	999855.79	1108815.40	1108959.61
19	99666.12	1220671.56	1224760.82	999854.75	1108659.88	1108805.13
18	99663.74	1216323.56	1220427.39	999853.72	1108504.91	1108651.19
17	99661.35	1212006.22	1216124.62	999852.68	1108350.48	1108497.81
16	99658.95	1207719.22	1211852.18	999851.63	1108196.60	1108344.96
15	99656.55	1203462.23	1207609.76	999850.58	1108043.25	1108192.66
14	99654.14	1199234.95	1203397.05	999849.53	1107890.43	1108040.89
13	99651.72	1195037.05	1199213.72	999848.48	1107738.14	1107889.66
12	99649.29	1190868.24	1195059.48	999847.42	1107586.37	1107738.95
11	99646.85	1186728.21	1190934.02	999846.36	1107435.13	1107588.77
10	99644.40	1182616.67	1186837.05	999845.29	1107284.40	1107439.11
9	99641.94	1178533.31	1182768.27	999844.22	1107134.19	1107289.97
8	99639.48	1174477.86	1178727.39	999843.15	1106984.48	1107141.34
7	99637.01	1170450.03	1174714.12	999842.07	1106835.29	1106993.22
6	99634.53	1166449.53	1170728.19	999840.99	1106686.60	1106845.61
5	99632.04	1162476.08	1166769.32	999839.90	1106538.40	1106698.50
4	99629.54	1158530.42	1162837.23	999838.81	1106390.71	1106553.89
3	99627.03	1154609.27	1158931.65	999837.72	1106243.50	1106405.78
2	99624.52	1150715.36	1155052.31	999836.63	1106096.79	1106260.17
1	99622.00	1146847.43	1151198.96	999835.53	1105950.56	1106115.04
0	99619.47	1143005.23	1147371.32	999834.42	1105804.82	1105970.40

5	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tagente	Tomologarith. pro Secante
0	8715.57	8748.87	100381.98	894029.60	894195.18	1000165.58
1	8744.55	8778.18	100384.54	894173.76	894340.44	1000166.68
2	8773.53	8807.49	100387.11	894317.43	894485.23	1000167.80
3	8802.51	8836.81	100389.69	894460.63	894629.54	1000168.91
4	8831.48	8866.12	100392.28	894603.35	894773.38	1000170.03
5	8860.46	8895.44	100394.87	894745.61	894916.76	1000171.15
6	8889.43	8924.76	100397.47	894887.39	895059.67	1000172.28
7	8918.40	8954.08	100400.08	895028.71	895202.11	1000173.40
8	8947.38	8983.41	100402.70	895169.57	895344.10	1000174.54
9	8976.35	9012.73	100405.33	895309.96	895485.64	1000175.67
10	9005.32	9042.06	100407.97	895449.91	895626.72	1000176.82
11	9034.29	9071.38	100410.61	895589.40	895767.35	1000177.96
12	9063.26	9100.71	100413.26	895728.43	895907.54	1000179.11
13	9092.23	9130.04	100415.92	895867.03	896047.28	1000180.26
14	9121.19	9159.38	100418.59	896005.17	896186.59	1000181.41
15	9150.16	9188.71	100421.27	896142.88	896325.45	1000182.57
16	9179.13	9218.04	100423.96	896280.14	896463.88	1000183.74
17	9208.09	9247.38	100426.66	896416.97	896601.88	1000184.90
18	9237.06	9276.72	100429.37	896553.37	896739.44	1000186.07
19	9266.02	9306.06	100432.08	896689.34	896876.58	1000187.25
20	9294.99	9335.40	100434.80	896824.87	897013.30	1000188.42
21	9323.95	9364.74	100437.53	896959.99	897149.59	1000189.60
22	9352.91	9394.09	100440.27	897094.68	897285.47	1000190.79
23	9381.87	9423.44	100443.02	897228.95	897420.92	1000191.98
24	9410.83	9452.78	100445.78	897362.80	897555.97	1000193.17
25	9439.79	9482.13	100448.55	897496.24	897690.60	1000194.37
26	9468.75	9511.48	100451.33	897629.26	897824.83	1000195.57
27	9497.71	9540.84	100454.11	897761.88	897958.65	1000196.77
28	9526.66	9570.19	100456.90	897894.08	898092.06	1000197.98
29	9555.62	9599.55	100459.70	898025.89	898225.07	1000199.19
30	9584.58	9628.90	100462.51	898157.29	898357.69	1000200.40
31	9613.53	9658.26	100465.33	898288.29	898489.91	1000201.62
32	9642.48	9687.63	100468.16	898418.89	898621.73	1000202.84
33	9671.44	9716.99	100470.99	898549.10	898753.17	1000204.07
34	9700.39	9746.35	100473.83	898678.91	898884.21	1000205.30
35	9729.34	9775.72	100476.68	898808.34	899014.87	1000206.53
36	9758.29	9805.09	100479.54	898937.37	899145.14	1000207.77
37	9787.24	9834.46	100482.41	899066.02	899275.03	1000209.01
38	9816.19	9863.83	100485.29	899194.29	899404.54	1000210.25
39	9845.14	9893.20	100488.18	899322.17	899533.67	1000211.50
40	9874.08	9922.57	100491.08	899449.68	899662.43	1000212.75
41	9903.03	9951.95	100493.99	899576.81	899790.81	1000214.01
42	9931.97	9981.33	100496.90	899703.56	899918.83	1000215.27
43	9960.92	10010.71	100499.82	899829.94	900046.47	1000216.53
44	9989.86	10040.09	100502.75	899955.95	900173.75	1000217.80
45	10018.81	10069.47	100505.69	900081.60	900300.66	1000219.07
46	10047.75	10098.85	100508.64	900206.87	900427.21	1000220.34
47	10076.69	10128.24	100511.60	900331.79	900553.40	1000221.62
48	10105.63	10157.63	100514.57	900456.34	900679.24	1000222.90
49	10134.57	10187.02	100517.54	900580.53	900804.71	1000224.18
50	10163.51	10216.41	100520.52	900704.36	900929.84	1000225.47
51	10192.45	10245.80	100523.51	900827.84	901054.61	1000226.77
52	10221.38	10275.20	100526.51	900950.96	901179.03	1000228.06
53	10250.32	10304.60	100529.51	901073.74	901303.10	1000229.36
54	10279.25	10334.00	100532.54	901196.16	901426.82	1000230.67
55	10308.19	10363.40	100535.57	901318.23	901550.21	1000231.97
56	10337.12	10392.80	100538.60	901439.96	901673.25	1000233.28
57	10366.05	10422.20	100541.64	901561.35	901795.94	1000234.60
58	10394.99	10451.60	100544.69	901682.39	901918.31	1000235.93
59	10423.92	10481.01	100547.75	901803.09	902040.33	1000237.24
60	10452.85	10510.42	100550.82	901923.46	902163.02	1000238.57

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
60	99619.47	1143005.23	1147371.32	999834.42	1105804.82	1105970.40
59	99616.93	1139188.49	1143569.16	999833.32	1105659.56	1105826.24
58	99614.38	1135396.96	1139792.20	999832.20	1105514.77	1105682.57
57	99611.82	1131630.40	1136040.21	999831.09	1105370.46	1105539.37
56	99609.26	1127888.55	1132312.93	999829.97	1105226.62	1105396.65
55	99606.69	1124171.17	1128610.13	999828.85	1105083.24	1105254.39
54	99604.11	1120478.03	1124931.56	999827.72	1104940.33	1105112.61
53	99601.52	1116808.88	1121276.99	999826.60	1104797.89	1104971.29
52	99598.92	1113163.50	1117646.17	999825.46	1104655.90	1104830.43
51	99596.31	1109541.64	1114038.90	999824.33	1104514.36	1104690.04
50	99593.69	1105943.10	1110454.92	999823.18	1104373.28	1104550.09
49	99591.07	1102367.63	1106894.03	999822.04	1104232.65	1104410.60
48	99588.44	1098815.01	1103355.99	999820.89	1104092.46	1104271.57
47	99585.80	1095285.04	1099840.59	999819.74	1103952.72	1104132.97
46	99583.15	1091777.49	1096347.61	999818.59	1103813.41	1103994.83
45	99580.49	1088292.14	1092876.84	999817.43	1103674.55	1103857.12
44	99577.82	1084828.80	1089428.07	999816.26	1103536.12	1103719.86
43	99575.15	1081387.24	1086001.09	999815.10	1103398.12	1103583.03
42	99572.47	1077967.27	1082595.69	999813.93	1103260.56	1103446.63
41	99569.78	1074568.68	1079211.68	999812.75	1103123.42	1103310.66
40	99567.08	1071191.26	1075848.84	999811.58	1102986.70	1103175.13
39	99564.37	1067834.84	1072506.99	999810.40	1102850.41	1103040.01
38	99561.65	1064499.19	1069185.92	999809.21	1102714.53	1102905.32
37	99558.92	1061184.14	1065885.45	999808.02	1102579.08	1102771.05
36	99556.19	1057889.50	1062605.38	999806.83	1102444.03	1102637.20
35	99553.45	1054615.07	1059345.53	999805.63	1102309.40	1102503.76
34	99550.70	1051360.67	1056105.70	999804.43	1102175.17	1102370.74
33	99547.94	1048126.11	1052885.72	999803.23	1102041.35	1102238.12
32	99545.17	1044911.22	1049685.41	999802.02	1101907.94	1102105.92
31	99542.40	1041715.81	1046504.58	999800.81	1101774.93	1101974.11
30	99539.62	1038539.71	1043343.05	999799.60	1101642.31	1101842.71
29	99536.83	1035382.74	1040200.66	999798.38	1101510.09	1101711.71
28	99534.03	1032244.73	1037077.23	999797.16	1101378.27	1101581.12
27	99531.23	1029125.51	1033972.59	999795.93	1101246.83	1101450.90
26	99528.40	1026024.90	1030886.56	999794.70	1101115.79	1101321.09
25	99525.57	1022942.76	1027818.99	999793.47	1100985.13	1101191.66
24	99522.74	1019878.90	1024769.71	999792.23	1100854.86	1101062.63
23	99519.90	1016833.16	1021738.55	999790.99	1100724.97	1100933.98
22	99517.05	1013805.39	1018725.36	999789.75	1100595.46	1100805.71
21	99514.19	1010795.42	1015729.98	999788.50	1100466.33	1100677.83
20	99511.32	1007803.11	1012752.24	999787.25	1100337.57	1100550.32
19	99508.44	1004828.28	1009792.00	999785.99	1100209.19	1100423.19
18	99505.55	1001870.80	1006849.09	999784.73	1100081.17	1100296.44
17	99502.66	998930.50	1003923.38	999783.47	1099953.53	1100170.06
16	99499.76	996007.24	1001014.70	999782.20	1099826.25	1100044.05
15	99496.85	993100.83	998122.91	999780.93	1099699.34	1099918.40
14	99493.93	990211.25	995247.87	999779.66	1099572.79	1099793.13
13	99491.00	987338.23	992389.43	999778.38	1199446.60	1099668.21
12	99488.06	984481.66	989547.44	999777.10	1199320.76	1099543.66
11	99485.12	981641.40	986721.76	999775.82	1099195.29	1199419.47
10	99482.17	978817.32	983912.27	999774.53	1099070.16	1199295.64
9	99479.21	976009.27	981118.80	999773.23	1098945.39	1099172.16
8	99476.24	973217.13	978341.24	999771.94	1098820.97	1099049.04
7	99473.26	970440.75	975579.44	999770.64	1098696.90	1098926.26
6	99470.27	967680.00	972833.27	999769.33	1098573.18	1098803.84
5	99467.28	964934.75	970102.60	999768.03	1098449.79	1098681.77
4	99464.28	962204.86	967387.30	999766.72	1198326.75	1098560.04
3	99461.27	959490.22	964687.24	999765.40	1098204.06	1098438.65
2	99458.25	956790.68	962002.29	999764.08	1198081.69	1098317.61
1	99455.22	954106.13	959332.33	999762.76	1097959.67	1098196.91
0	99452.18	951436.45	956677.22	999761.43	1097837.98	1098076.54

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0	10452.85	10510.42	100550.82	901923.46	902162.02	1000238.57
1	10481.78	10539.83	100553.90	902043.48	902283.38	1000239.89
2	10510.70	10569.24	100556.99	902163.18	902404.41	1000241.23
3	10539.63	10598.66	100560.09	902282.54	902525.10	1000242.57
4	11568.56	10628.08	100563.20	902401.57	902645.48	1000243.91
5	10597.48	10657.50	100566.31	902520.27	902765.52	1000245.25
6	10626.41	10686.92	100569.43	902638.65	902885.24	1000246.60
7	10655.33	10716.34	100572.56	902756.69	903004.64	1000247.95
8	10684.25	10745.76	100575.70	902874.42	903123.73	1000249.31
9	10713.18	10775.19	100578.85	902991.82	903242.49	1000250.67
10	10742.10	10804.62	100582.01	903108.90	903360.93	1000252.03
11	10771.02	10834.05	100585.18	903225.67	903479.06	1000253.40
12	10799.94	10863.48	100588.35	903342.12	903596.88	1000254.77
13	10828.85	10892.91	100591.53	903458.25	903714.39	1000256.14
14	10857.77	10922.34	100594.72	903574.07	903831.59	1000257.52
15	10886.69	10951.78	100597.92	903689.58	903948.48	1000258.90
16	10915.60	10981.22	100601.13	903804.77	904065.06	1000260.29
17	10944.52	11010.66	100604.35	903919.66	904181.34	1000261.67
18	10973.43	11040.10	100607.58	904034.24	904297.31	1000263.07
19	11002.34	11069.54	100610.81	904148.52	904412.99	1000264.46
20	11031.26	11098.99	100614.05	904262.49	904528.36	1000265.86
21	11060.17	11128.44	100617.30	904376.17	904643.43	1000267.27
22	11089.08	11157.89	100620.56	904489.54	904758.21	1000268.68
23	11117.99	11187.34	100623.83	904602.61	904872.70	1000270.09
24	11146.89	11216.79	100627.11	904715.38	904986.89	1000271.50
25	11175.80	11246.25	100630.40	904827.86	905100.78	1000272.92
26	11204.71	11275.71	100633.70	904940.05	905214.39	1000274.34
27	11233.61	11305.17	100637.01	905051.94	905327.71	1000275.77
28	11262.52	11334.63	100640.32	905163.54	905440.74	1000277.20
29	11291.42	11364.09	100643.64	905274.85	905553.49	1000278.63
30	11320.32	11393.56	100646.97	905385.88	905665.95	1000280.07
31	11349.22	11423.03	100650.31	905496.61	905778.13	1000281.51
32	11378.12	11452.50	100653.66	905607.05	905890.02	1000282.96
33	11407.02	11481.97	100657.02	905717.23	906001.64	1000284.41
34	11435.92	11511.44	100660.39	905827.11	906112.97	1000285.86
35	11464.82	11540.91	100663.77	905936.72	906224.03	1000287.32
36	11493.71	11570.39	100667.15	906046.04	906334.82	1000288.78
37	11522.61	11599.87	100670.54	906155.09	906445.33	1000290.24
38	11551.51	11629.35	100673.94	906263.86	906555.56	1000291.71
39	11580.40	11658.83	100677.35	906372.35	906665.53	1000293.18
40	11609.29	11688.31	100680.77	906480.57	906775.22	1000294.65
41	11638.18	11717.80	100684.20	906588.52	906884.65	1000296.13
42	11667.07	11747.29	100687.64	906696.19	906993.81	1000297.61
43	11695.96	11776.78	100691.08	906803.60	907102.70	1000299.10
44	11724.85	11806.28	100694.53	906910.74	907211.33	1000300.59
45	11753.74	11835.78	100697.99	907017.61	907319.69	1000302.08
46	11782.63	11865.28	100701.46	907124.21	907427.79	1000303.58
47	11811.51	11894.78	100704.94	907230.55	907535.63	1000305.08
48	11840.40	11924.28	10 708.43	907336.63	907643.21	1000306.58
49	11869.28	11953.78	100711.93	907442.44	907750.53	1000308.09
50	11898.16	11983.28	100715.44	907547.99	907857.60	1000309.60
51	11927.04	12012.79	100718.96	907653.29	907964.41	1000311.12
52	11955.93	12042.30	100722.48	907758.32	908070.96	1000312.64
53	11984.81	12071.81	100726.01	907863.10	908177.26	1000314.16
54	12013.68	12101.32	100729.55	907967.62	908283.31	1000315.69
55	12042.56	12130.84	100733.10	908071.89	908389.11	1000317.22
56	12071.44	12160.36	100736.66	908175.90	908494.66	1000318.75
57	12100.31	12189.88	100740.23	908279.66	908599.96	1000320.29
58	12129.19	12219.40	100743.81	908383.17	908705.01	1000321.83
59	12158.06	12248.93	100747.40	908486.43	908809.81	1000323.38
60	12186.93	12278.46	100750.99	908589.45	908914.38	1000324.93

'	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tägente	Tomologarith. pro Secante
60	99452.18	951436.45	956677.22	999761.43	1097837.98	1098076.54
59	99449.14	948781.49	954036.86	999760.11	1097716.62	1097956.52
58	99446.09	946141.16	951411.10	999758.77	1097595.59	1097836.82
57	99443.03	943515.31	948799.84	999757.43	1097474.90	1097717.46
56	99439.96	940903.84	946202.96	999756.09	1097354.52	1097598.43
55	99436.88	938306.63	943620.33	999754.75	1097234.48	1097479.73
54	99433.79	935723.55	941051.84	999753.40	1097114.76	1097361.35
53	99430.69	933154.50	938497.38	999752.05	1096995.36	1097243.31
52	99427.59	930599.36	935956.82	999750.69	1096876.27	1097125.58
51	99424.48	928058.02	933430.06	999749.33	1096757.51	1097008.18
50	99421.36	925530.35	930916.99	999747.97	1096639.07	1096891.10
49	99418.23	923016.27	928417.49	999746.60	1096520.94	1096774.33
48	99415.09	920515.64	925931.45	999745.23	1096403.12	1096657.88
47	99411.94	918028.38	923458.77	999743.86	1096285.61	1096541.75
46	99408.79	915554.36	920999.34	999742.48	1096168.41	1096425.93
45	99405.63	913093.48	918553.05	999741.10	1096051.52	1096310.42
44	99402.46	910645.64	916119.80	999739.71	1095934.94	1096195.23
43	99399.28	908210.74	913699.49	999738.33	1095818.66	1096080.34
42	99396.09	905788.67	911292.00	999736.93	1095702.69	1095965.76
41	99392.89	903379.33	908897.25	999735.54	1095587.01	1095851.48
40	99389.69	900982.61	906515.12	999734.14	1095471.64	1095737.51
39	99386.48	898598.43	904145.53	999732.73	1095356.57	1095623.83
38	99383.26	896226.68	901788.37	999731.32	1095241.79	1095510.46
37	99380.03	893867.26	899443.54	999729.91	1095127.30	1095397.39
36	99376.79	891520.08	897110.95	999728.50	1095013.11	1095284.62
35	99373.54	889185.05	894790.51	999727.08	1094899.22	1095172.14
34	99370.28	886862.06	892482.11	999725.66	1094785.61	1095059.95
33	99367.02	884551.03	890185.67	999724.23	1094672.29	1094948.06
32	99363.75	882251.86	887901.09	999722.80	1094559.26	1094836.46
31	99360.47	879964.46	885628.28	999721.37	1094446.51	1094725.15
30	99357.18	877688.74	883367.15	999719.93	1094334.05	1094614.12
29	99353.88	875424.61	881117.61	999718.49	1094221.87	1094503.39
28	99350.58	873171.98	878879.57	999717.04	1094109.98	1094392.94
27	99347.27	870930.77	876652.95	999715.59	1093998.36	1094282.77
26	99343.95	868700.88	874437.66	999714.14	1083887.03	1094172.89
25	99340.62	866482.23	872233.61	999712.68	1093775.97	1094063.28
24	99337.28	864274.75	870040.71	999711.22	1093665.18	1093953.96
23	99333.93	862078.33	867858.89	999709.76	1093554.67	1093844.91
22	99330.57	859892.90	865688.05	999708.29	1093444.44	1093736.14
21	99327.20	857718.38	863528.12	999706.82	1093334.47	1093627.65
20	99323.83	855554.68	861379.01	999705.35	1093224.78	1093519.43
19	99320.45	853401.72	859240.65	999703.87	1093115.35	1093411.48
18	99317.06	851259.43	857112.95	999702.39	1093006.19	1093303.81
17	99313.66	849127.72	854995.84	999700.90	1092897.30	1093196.40
16	99310.25	847006.51	852889.23	999699.41	1092788.67	1093089.26
15	99306.84	844895.73	850793.04	999697.92	1092680.31	1092982.39
14	99303.42	842795.31	848707.21	999696.42	1092572.21	1092875.79
13	99299.99	840705.15	846631.65	999694.92	1092464.37	1092769.45
12	99296.55	838625.19	844566.29	999693.42	1092356.79	1092663.37
11	99293.10	836555.36	842511.05	999691.91	1092249.47	1092557.56
10	99289.64	834495.57	840465.86	999690.40	1092142.40	1092452.01
9	99286.17	832445.77	838430.65	999688.88	1092035.59	1092346.71
8	99282.70	830405.86	836405.34	999687.36	1091929.04	1092241.68
7	99279.22	828375.79	834389.86	999685.84	1091822.74	1092136.90
6	99275.73	826355.47	832384.35	999684.31	1091716.69	1092032.38
5	99272.23	824344.85	830388.12	999682.78	1091610.89	1091928.11
4	99268.72	822343.84	828401.71	999681.25	1091505.34	1091824.10
3	99265.21	820352.39	826424.85	999679.71	1091400.04	1091720.34
2	99261.69	818370.41	824457.48	999678.17	1091294.99	1091616.83
1	99258.16	816397.86	822499.52	999676.62	1091190.19	1091513.57
0	99254.62	814434.64	820550.90	999675.07	1091085.62	1091410.55

7	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tagente	Tomologarith. pro Secante
0	12186.93	12278.46	100750. 99	908589.45	908914. 38	1000324.93
1	12215. 81	12307. 99	100754. 59	908692. 21	909018. 69	1000326. 48
2	12244. 68	12337. 52	100758. 20	908794. 73	909122. 77	1000328. 04
3	12273. 55	12367. 05	100761. 82	908897. 00	909226. 60	1000329. 60
4	12302.41	12396. 58	100765. 45	908999. 03	909330. 20	1000331. 16
5	12331. 28	12426. 12	100769. 09	909100. 82	909433. 55	1000332. 73
6	12360. 15	12455. 66	100772. 74	909202. 37	909536. 67	1000334. 30
7	12389. 01	12485. 20	100776. 39	909303. 67	909639. 55	1000335. 88
8	12417. 88	12514. 74	100780. 05	909404. 74	909742. 19	1000337. 46
9	12446. 74	12544. 29	100783. 72	909505. 56	909844. 60	1000339. 04
10	12475. 60	12573. 84	100787. 40	909606. 15	909946. 78	1000340. 63
11	12504. 46	12603. 39	100791. 09	909706. 51	910048. 72	1000342. 22
12	12533. 32	12632. 94	100794. 79	909806. 62	910150. 44	1000343. 81
13	12562. 18	12662. 49	100798. 50	909906. 51	910251. 92	1000345. 41
14	12591. 04	12692. 05	100802. 22	910006. 16	910353. 17	1000347. 01
15	12619. 90	12721. 01	100805. 95	910105. 58	910454. 20	1000348. 62
16	12648. 75	12751. 17	100809. 6	910204. 77	910555. 00	1000350. 23
17	12677. 61	12780. 73	100813. 4	910303. 73	910655. 57	1000351. 84
18	12706. 46	12810. 29	100817. 18	910402. 46	910755. 91	1000353. 45
19	12735. 31	12839. 86	100820. 94	910500. 96	910856. 04	1000355. 07
20	12764. 16	12869. 43	100824. 71	910599. 24	910956. 94	1000356. 70
21	12793. 01	12899. 00	100828. 49	910697. 29	911055. 62	1000358. 33
22	12821. 86	12928. 57	100832. 28	910795. 12	911155. 08	1000359. 96
23	12850. 71	12958. 15	100836 07	910892. 72	911254. 31	1000361. 59
24	12879. 56	12987. 73	100839. 88	910990. 10	911353. 33	1000363. 23
25	12908. 41	13017. 31	100843 70	911087. 26	911452. 13	1000364. 87
26	12937. 25	13046. 89	100847. 52	911184. 20	911550. 72	1000366. 52
27	12966. 09	13076. 48	100851. 35	911280. 92	911649. 09	1000368. 17
28	12994. 94	13106. 07	100855. 19	911377. 42	911747. 24	1000369. 82
29	13023. 78	13135. 66	100859. 04	911473. 70	911845. 18	1000371. 48
30	13052. 62	13165. 25	100862. 90	911569. 77	911942. 91	1000373 14
31	13081. 46	13194. 84	100866. 77	911665. 63	912040. 43	1000374. 81
32	13110. 30	13224. 44	100870. 65	911761. 28	912137 73	1000376. 48
33	13139. 13	13254. 04	100874. 53	911856. 67	912234. 82	1000378. 15
34	13167. 97	13283. 64	100878. 42	911951. 88	912331. 71	1000379. 83
35	13196. 81	13313. 24	100882. 32	912046. 88	912428. 39	1000381. 51
36	13225 64	13342. 85	100886. 23	912141. 67	912524. 86	1000383. 19
37	13254. 47	13372. 46	100890. 15	912236. 24	912621. 12	1000384. 88
38	13283. 30	13402. 07	100894. 08	912330. 61	912717. 18	1000386. 57
39	13312. 13	13431. 68	100898. 02	912424. 77	912813. 03	1000388. 26
40	13340. 96	13461. 29	100901. 97	912518. 72	912908. 68	1000389. 96
41	13369. 79	13490. 91	100905. 92	912612. 46	913004. 13	1000391. 66
42	13398. 62	13520. 53	100909. 88	912706. 00	913099. 37	1000393. 37
43	13427. 44	13550. 15	100913. 85	912799. 34	913194. 42	1000395. 08
44	13456. 27	13579. 77	100917. 83	912892. 47	913280. 26	1000396. 79
45	13485. 09	13609. 40	100921. 82	912985. 39	913383. 91	1000398. 51
46	13513. 92	13639. 03	100925. 82	913078. 12	913478. 35	1000400. 23
47	13542. 74	13668. 66	100929. 83	913170. 64	913572. 60	1000401. 96
48	13571. 56	13698. 29	100933. 85	913262. 97	913666. 65	1000403. 69
49	13600. 38	13727. 93	100937. 88	913355. 09	913760. 51	1000405. 42
50	13629. 19	13757. 57	100941. 92	913447. 02	913854. 17	1000407. 16
51	13658. 01	13787. 21	100945. 96	913538. 75	913947. 64	1000408. 89
52	13686. 83	13816. 85	100950. 01	913630. 28	914040. 92	1000410. 64
53	13715. 64	13846. 50	100954. 07	913721. 61	914134. 00	1000412. 39
54	13744. 45	13876. 15	100958. 14	913812. 75	914226. 89	1000414. 14
55	13773. 27	13905. 80	100962. 22	913903. 70	914319. 59	1000415. 89
56	13802. 08	13935. 45	100966. 31	913994. 45	914412. 10	1000417. 65
57	13830. 89	13965. 10	100970. 41	914085. 01	914504. 42	1000419. 41
58	13859. 70	13994. 76	100974. 52	914175. 37	914596. 55	1000421. 18
59	13888. 50	14024. 42	100978. 64	914265. 55	914688. 50	1000422. 95
60	13917. 31	14054. 08	100982. 76	914355. 53	914780. 25	1000424. 72

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60	99254.62	814434.64	820550.90	999675.07	1091085.62	1091410.55
59	99251.07	812480.71	818611.57	999673.52	1090981.31	1091307.79
58	99247.51	810535.99	816681.45	999671.96	1090877.23	1091205.27
57	99243.94	808600.42	814760.48	999670.40	1090773.40	1091103.00
56	99240.36	806673.94	812848.60	999668.84	1090669.80	1091000.97
55	99236.78	804756.47	810945.73	999667.27	1090566.45	1090899.18
54	99233.19	802847.96	809051.82	999665.70	1090463.33	1090797.63
53	99229.59	800948.35	807166.81	999664.12	1090360.45	1090696.33
52	99225.98	799057.56	805290.62	999662.54	1090257.81	1090595.26
51	99222.36	797175.55	803423.21	999660.96	1090155.40	1090494.44
50	99218.74	795302.24	801564.50	999659.37	1090053.22	1090393.85
49	99215.11	793437.58	799714.45	999657.78	1089951.28	1090293.49
48	99211.47	791581.51	797872.98	999656.19	1089849.56	1090193.38
47	99207.82	789733.96	796040.03	999654.59	1089748.08	1090093.49
46	99204.16	787894.89	794215.56	999652.99	1089646.83	1089993.84
45	99200.49	786064.23	792399.50	999651.38	1089545.80	1089894.42
44	99196.81	784241.91	790591.79	999649.77	1089445.00	1089795.23
43	99193.13	782427.90	788792.38	999648.16	1089344.43	1089696.27
42	99189.44	780622.12	787001.20	999646.55	1089244.09	1089597.54
41	99185.74	778824.53	785218.21	999644.93	1089143.96	1089499.04
40	99182.03	777035.06	783443.35	999643.30	1089044.06	1089400.76
39	99178.31	775253.66	781676.56	999641.67	1088944.38	1089302.71
38	99174.59	773480.28	779917.78	999640.04	1088844.92	1089204.88
37	99170.86	771714.86	778166.97	999638.41	1088745.69	1089107.28
36	99167.12	769957.35	776424.06	999636.77	1088646.67	1089009.90
35	99163.37	768207.69	774689.01	999635.13	1088547.87	1088912.74
34	99159.61	766465.84	772961.76	999633.48	1088449.28	1088815.80
33	99155.84	764731.74	771242.27	999631.83	1088350.91	1088719.08
32	99152.06	763005.33	769530.47	999630.18	1088252.76	1088622.58
31	99148.28	761286.57	767826.31	999628.52	1088154.82	1088526.30
30	99144.49	759575.41	766129.76	999626.86	1088057.09	1088430.23
29	99140.69	757871.79	764440.75	999625.19	1087959.57	1088334.38
28	99136.88	756175.67	762759.23	999623.52	1087862.27	1088238.75
27	99133.06	754486.99	761085.16	999621.85	1087765.18	1088143.33
26	99129.23	752805.71	759418.49	999620.17	1087668.29	1088048.12
25	99125.39	751131.78	757759.16	999618.49	1087571.61	1087953.12
24	99121.55	749465.14	756107.13	999616.81	1087475.14	1087858.33
23	99117.70	747805.76	754462.36	999615.12	1087378.88	1087763.76
22	99113.84	746153.57	752824.78	999613.43	1087282.82	1087669.39
21	99109.97	744508.55	751194.37	999611.74	1087186.97	1087575.23
20	99106.09	742870.64	749571.06	999610.04	1087091.32	1087481.28
19	99102.21	741239.78	747954.82	999608.34	1086995.87	1087387.54
18	99098.32	739615.95	746345.60	999606.63	1086900.63	1087294.00
17	99094.42	737999.09	744743.35	999604.92	1086805.58	1087200.66
16	99090.51	736389.16	743148.03	999603.21	1086710.74	1087107.53
15	99086.59	734786.10	741559.59	999601.49	1086616.09	1087014.61
14	99082.66	733189.89	739977.98	999599.77	1086521.65	1086921.88
13	99078.72	731600.47	738403.18	999598.04	1086427.40	1086829.36
12	99074.78	730017.80	736835.12	999596.31	1086333.35	1086737.03
11	99070.83	728441.84	735273.77	999594.58	1086239.49	1086644.91
10	99066.87	726872.55	733719.09	999592.84	1086145.83	1086552.98
9	99062.90	725309.87	732171.02	999591.11	1086052.36	1086461.25
8	99058.92	723753.78	730629.54	999589.36	1085959.08	1086369.72
7	99054.93	722204.22	729094.60	999587.61	1085866.00	1086278.39
6	99050.94	720661.16	727566.16	999585.86	1085773.11	1086187.25
5	99046.94	719124.56	726044.17	999584.11	1085680.41	1086096.30
4	99042.93	717594.37	724528.59	999582.35	1085587.90	1086005.55
3	99038.91	716070.56	723019.40	999580.59	1085495.58	1085914.99
2	99034.88	714553.08	721516.53	999578.82	1085403.45	1085824.63
1	99030.84	713041.90	720019.96	999577.05	1085311.50	1085734.45
0	99026.80	711536.97	718529.65	999575.28	1085219.75	1085644.47

′	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0	13917.31	14054.08	100982.76	914355.53	914780.25	1000424.72
1	13946.12	14083.74	100986.89	914445.32	914871.82	1000426.50
2	13974.92	14113.41	100991.03	914534.93	914963.21	1000428.28
3	14003.72	14143.08	100995.18	914624.35	915054.41	1000430.07
4	14032.52	14172.75	100999.34	914713.58	915145.43	1000431.85
5	14061.32	14202.43	101003.51	914802.62	915236 27	1000433.65
6	14090.12	14232.11	101007.69	914891.49	915326.92	1000435.44
7	14118.92	14261.79	101011.88	914980.15	915417.39	1000437.24
8	14147.72	14291.47	101016.07	915068.64	915507.69	1000439.05
9	14176.51	14321.15	101020.27	915156.94	915597.80	1000440.85
10	14205.31	14350.84	101024.48	915245.07	915687.73	1000442.66
11	14234.10	14380.53	101028.70	915333.01	915777.48	1000444.48
12	14262.89	14410.22	101032.93	915420.76	915867.06	1000446.30
13	14291.68	14439.91	101037.17	915508.34	915956.46	1000448.12
14	14320.47	14469.61	101041.42	915595.74	916045.69	1000449.95
15	14349.26	14499.31	101045.68	915682.96	916134.73	1000451.78
16	14378.05	14529.01	101049.95	915770.00	916223.61	1000453.61
17	14406.84	14558.71	101054.23	915856.86	916312.31	1000455.45
18	14435.62	14588.42	101058.51	915943.54	916400.83	1000457.29
19	14464.40	14618.13	101062.80	916030.05	916489.19	1000459.13
20	14493.19	14647.84	101067.10	916116.39	915577.37	1000460.98
21	14521.97	14677.55	101071.51	916202.54	916665.38	1000462.83
22	14550.75	14707.27	101075.73	916288.53	916753.22	1000464.69
23	14579.53	14736.99	101080.06	916374.34	916840.89	1000466.55
24	14608.30	14766.71	101084.40	916459.98	916928.39	1000468.41
25	14637.08	14796.44	101088.75	916545.45	917015.72	1000470.28
26	14665.85	14826.17	101093.11	916630.74	917102.80	1000472.1
27	14694.63	14855.90	101097.47	916715.86	917189.89	1000474.0
28	14723.40	14885.63	101101.84	916800.81	917276.72	1000475.91
29	14752.17	14915.36	101106.22	916885.59	917363.38	1000477.7
30	14780.94	14945.10	101110.61	916970.21	917449.88	1000479.67
31	14809.71	14974.84	101115.01	917054.65	917536.22	1000481.56
32	14838.48	15004.58	101119.42	917138.93	917622.39	1000483.46
33	14867.24	15034.33	101123.84	917223.05	917708.40	1000485.36
34	14896.01	15064.08	101128.27	917306.99	917794.25	1000487.26
35	14924.77	15093.83	101132.71	917390.77	917879.93	1000489.16
36	14953.53	15122.58	101137.15	917474.39	917965.46	1000491.07
37	14982.30	15153.33	101141.60	917557.84	918050.82	1000492.98
38	15011.06	15183.09	101146.06	917641.12	918136.02	1000494.90
39	15039.81	15212.85	101150.53	917724.25	918221.06	1000496.82
40	15068.57	15242.61	101155.01	917807.21	918305.95	1000498.74
41	15097.33	15272.38	101159.50	917890.01	918390.68	1000500.67
42	15126.08	15302.15	101164.00	917972.65	918475.25	1000502.60
43	15154.84	15331.92	101168.51	918055.12	918559.66	1000504.54
44	15183.59	15361.89	101173.03	918137.44	918643.92	1000506.48
45	15212.34	15391.47	101177.56	918219.60	918728.02	1000508.42
46	15241.09	15421.25	101182.09	918301.60	918811.96	1000510.36
47	15269.84	15451.03	101186.63	918383.44	918895.75	1000512.31
48	15298.58	15480.82	101191.18	918465.12	918979.39	1000514.27
49	15327.33	15510.61	101195.74	918546.65	919062.87	1000516.23
50	15356.07	15540.40	101200.31	918628.02	919146.21	1000518.19
51	15384.82	15570.19	101204.89	918709.23	919229.39	1000520.15
52	15413.56	15599.98	101209.48	918790.29	919312.41	1000522.12
53	15442.30	15629.78	101214.08	918871.20	919395.29	1000524.09
54	15471.04	15659.58	101218.69	918951.95	919478.02	1000526.07
55	15499.78	15689.38	101223.31	919032.54	919560.59	1000528.05
56	15528.51	15719.19	101227.93	919112.99	919643.02	1000530.03
57	15557.25	15749.00	101232.56	919193.28	919725.30	1000532.02
58	15585.98	15778.81	101237.20	919273.42	919807.43	1000534.01
59	15614.72	15808.62	101241.85	919353.41	919889.41	1000536.01
60	15643.45	15838.44	101246.51	919433.24	919971.25	1000538.01

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
60	99026.80	711536.97	718529.65	999575.28	1085219.75	1085644.47
59	99022.75	710038.26	717045.56	999573.50	1085128.18	1085554.68
58	99018.69	708545.73	715567.64	999571.72	1085036.79	1085465.07
57	99014.62	707059.34	714095.87	999569.93	1084945.59	1085375.65
56	99010.54	705579.05	712630.19	999568.15	1084854.57	1085286.42
55	99006.45	704104.82	711170.58	999566.35	1084763.73	1085197.38
54	99002.36	702636.62	709717.00	999564.56	1084673.08	1085108.52
53	98998.26	701174.41	708269.41	999562.76	1084582.61	1085019.85
52	98994.15	699718.06	706827.77	999560.95	1084492.31	1084931.36
51	98990.03	698267.81	705392.05	999559.15	1084402.20	1084843.06
50	98985.90	696823.35	703962.20	999557.34	1084312.27	1084754.93
49	98981.76	695384.73	702538.29	999555.52	1084222.52	1084666.99
48	98977.62	693951.92	701120.01	999553.70	1084132.94	1084579.24
47	98973.47	692524.89	699707.60	999551.88	1084043.54	1084491.66
46	98969.31	691103.59	698300.92	999550.05	1083954.31	1084404.26
45	98965.14	689687.99	696899.94	999548.22	1083865.27	1084317.04
44	98960.96	688278.07	695504.64	999546.39	1083776.39	1084230.00
43	98956.77	686873.78	694114.96	999544.55	1083687.69	1084143.14
42	98952.57	685475.08	692730.89	999542.71	1083599.17	1084056.46
41	98948.37	684081.96	691352.39	999540.87	1083510.81	1083969.95
40	98944.16	682694.37	689979.42	999539.02	1083422.63	1083883.61
39	98939.94	681312.27	688611.95	999537.17	1083334.62	1083797.46
38	98935.71	679935.65	687249.95	999535.31	1083246.78	1083711.47
37	98931.47	678564.46	685893.38	999533.45	1083159.11	1083625.66
36	98927.23	677198.67	684542.22	999531.59	1083071.61	1083540.02
35	98922.98	675838.26	683196.42	999529.72	1082984.28	1083454.56
34	98918.72	674483.18	681855.97	999527.85	1082897.11	1083369.26
33	98914.45	673133.41	680520.82	999525.97	1082810.11	1083284.14
32	98910.17	671788.91	679190.95	999524.09	1082723.28	1083199.19
31	98905.88	670449.66	677866.32	999522.21	1082636.62	1083114.41
30	98901.58	669115.62	676546.91	999520.33	1082550.12	1083029.79
29	98897.28	667786.77	675232.68	999518.44	1082463.78	1082945.35
28	98892.97	666463.07	673923.60	999516.54	1082377.61	1082861.07
27	98888.65	665144.49	672619.65	999514.64	1082291.60	1082776.95
26	98884.32	663831.00	671320.79	999512.74	1082205.75	1082693.01
25	98879.98	662522.58	670026.99	999510.84	1082120.07	1082609.23
24	98875.65	661219.19	668738.22	999508.93	1082034.54	1082525.61
23	98871.28	659920.80	667454.46	999507.02	1081949.18	1082442.16
22	98866.92	658627.39	666175.68	999505.10	1081863.98	1082358.88
21	98862.55	657338.92	664901.84	999503.18	1081778.94	1082275.75
20	98858.17	656055.38	663632.93	999501.26	1081694.05	1082192.79
19	98853.78	654776.72	662368.90	999499.33	1081609.32	1082109.99
18	98849.38	653502.93	661109.73	999497.40	1081524.75	1082027.35
17	98844.98	652233.96	659855.40	999495.46	1081440.34	1081944.88
16	98840.57	650969.81	658605.87	999493.52	1081356.08	1081862.56
15	98836.15	649710.43	657361.12	999491.58	1081271.98	1081780.40
14	98831.72	648455.81	656121.13	999489.64	1081188.04	1081698.40
13	98827.28	647205.91	654885.86	999487.69	1081104.25	1081616.56
12	98822.83	645960.70	653655.28	999485.73	1081020.61	1081534.88
11	98818.38	644720.17	652429.32	999483.77	1080937.13	1081453.35
10	98813.92	643484.28	651208.12	999481.81	1080853.79	1081371.98
9	98809.45	642253.01	649991.48	999479.85	1080770.61	1081290.77
8	98804.97	641026.33	648779.44	999477.88	1080687.59	1081209.71
7	98800.48	639804.22	647571.95	999475.91	1080604.71	1081128.80
6	98795.98	638586.65	646369.01	999473.93	1080521.98	1081048.05
5	98791.48	637373.59	645170.59	999471.95	1080439.41	1080967.46
4	98786.97	636165.02	643976.66	999469.97	1080356.98	1080887.01
3	98782.45	634960.92	642787.19	999467.98	1080274.70	1080806.72
2	98777.92	633761.26	641602.16	999465.99	1080192.57	1080726.58
1	98773.38	632566.01	640421.54	999463.99	1080110.59	1080646.59
0	98768.83	631375.15	639245.32	999461.99	1080028.75	1080566.76

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0	15643.45	15838.44	101246.51	919433.24	919971.25	1000538.01
1	15672.18	15868.26	101251.18	919512.93	920052.94	1000540.01
2	15700.91	15898.08	101255.86	919592.47	920134.49	1000542.02
3	15729.63	15927.91	101260.55	919671.86	920215.88	1000544.03
4	15758.36	15957.74	101265.25	919751.10	920297.14	1000546.04
5	15787.08	15987.57	101269.96	919830.19	920378.25	1000548.06
6	15815.81	16017.40	101274.67	919909.13	920459.22	1000550.08
7	15844.53	16047.24	101279.39	919987.93	920540.04	1000552.11
8	15873.25	16077.08	101284.12	920066.58	920620.72	1000554.13
9	15901.97	16106.92	101288.86	920145.09	920701.26	1000556.17
10	15930.69	16136.77	101293.61	920223.45	920781.65	1000558.20
11	15959.40	16166.62	101298.37	920301.67	920861.91	1000560.25
12	15988.12	16196.47	101303.14	920379.74	920942.03	1000562.29
13	16016.83	16226.32	101307.92	920457.66	921022.00	1000564.34
14	16045.55	16256.17	101312.71	920535.45	921101.84	1000566.39
15	16074.26	16286.03	101317.51	920613.09	921181.53	1000568.44
16	16102.97	16315.89	101322.31	920690.59	921261.09	1000570.50
17	16131.67	16345.76	101327.12	920767.95	921340.51	1000572.57
18	16160.38	16375.63	101331.94	920845.16	921419.80	1000574.63
19	16189.09	16405.50	101336.77	920922.24	921498.94	1000576.70
20	16217.79	16435.37	101341.61	920999.17	921577.95	1000578.78
21	16246.50	16465.25	101346.46	921075.97	921656.83	1000580.86
22	16275.20	16495.13	101351.32	921152.63	921735.56	1000582.94
23	16303.90	16525.01	101356.19	921229.14	921814.17	1000585.02
24	16332.60	16554.89	101361.07	921305.52	921892.64	1000587.11
25	16301.29	16584.78	101365.95	921381.76	921970.97	1000589.21
26	16389.99	16614.67	101370.84	921457.87	922049.17	1000591.30
27	16418.68	16644.56	101375.74	921533.84	922127.24	1000593.41
28	16447.38	16674.46	101380.61	921609.67	922205.18	1000595.51
29	16476.07	16704.36	101385.57	921685.36	922282.98	1000597.62
30	16504.76	16734.26	101390.50	921760.92	922360.65	1000599.73
31	16533.45	16764.16	101395.44	921836.35	982438.19	1000601.85
32	16562.14	16794.07	101400.39	921911.64	922515.61	1000603.97
33	16590.82	16823.98	101405.35	921986.80	922592.89	1000606.09
34	16619.51	16853.89	101410.32	922061.82	922670.04	1000608.22
35	16648.19	16883.81	101415.30	922136.71	922747.06	1000610.35
36	16676.87	16913.73	101420.29	922211.47	922823.95	1000612.48
37	16705.55	16943.65	101425.29	922286.09	922900.71	1000614.62
38	16734.23	16973.58	101430.29	922360.59	922977.35	1000616.76
39	16762.91	17003.51	101435.30	922434.95	923053.86	1000618.91
40	16791.59	17033.44	101440.32	922509.18	923130.24	1000621.06
41	16820.26	17063.37	101445.35	922583.28	923206.50	1000623.21
42	16848.94	17093.31	101450.39	922657.25	923282.62	1000625.37
43	16877.61	17123.25	101455.44	922731.10	923358.63	1000627.53
44	16906.28	17153.19	101460.50	922804.81	923434.51	1000629.70
45	16934.95	17183.14	101465.57	922878.39	923510.26	1000631.87
46	16963.62	17213.09	101470.64	922951.85	923585.89	1000634.04
47	16992.28	17243.04	101475.72	923025.18	923661.39	1000636.22
48	17020.95	17273.00	101480.81	923098.38	923736.78	1000638.40
49	17049.61	17302.96	101485.91	923171.45	923812.03	1000640.58
50	17078.28	17332.92	101491.02	923244.40	923887.17	1000642.77
51	17106.94	17362.88	101496.14	923317.22	923962.18	1000644.96
52	17135.60	17392.85	101501.27	923389.92	924037.08	1000647.15
53	17164.25	17422.82	101506.41	923462.49	924111.85	1000649.35
54	17192.91	17452.79	101511.56	923534.94	924186.50	1000651.56
55	17221.56	17482.77	101516.72	923607.26	924261.03	1000653.76
56	17250.22	17512.75	101521.89	923679.46	924335.43	1000655.97
57	17278.87	17542.73	101527.07	923751.53	924409.72	1000658.19
58	17307.52	17572.72	101532.26	923823.49	924483.89	1000660.41
59	17336.17	17602.71	101537.46	923895.32	924557.94	1000662.63
60	17364.82	17632.70	101542.67	923967.02	924631.88	1000664.85

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tăgente	Tomologarith. pro Secante
60	98768.83	631375.15	639245.32	999461.99	1080028.75	1080566.76
59	98764.28	630188.66	638073.47	999459.99	1079947.06	1080487.07
58	98759.72	629006.51	636905.95	999457.98	1079865.51	1080407.53
57	98755.15	627828.68	635742.76	999455.97	1079784.12	1080328.14
56	98750.57	626655.14	634583.86	999453.96	1079702.86	1080248.90
55	98745.98	625485.88	633429.23	999451.94	1079621.75	1080169.81
54	98741.38	624320.86	632278.84	999449.92	1079540.78	1080090.87
53	98736.77	623160.07	631132.69	999447.89	1079459.96	1080012.07
52	98732.16	622003.47	629990.73	999445.87	1079379.28	1079933.42
51	98727.54	620851.06	628852.95	999443.83	1079298.74	1079854.91
50	98722.91	619702.79	627719.33	999441.80	1079218.35	1079776.55
49	98718.27	618558.67	626589.84	999439.75	1079138.09	1079698.33
48	98713.62	617418.65	625464.46	999437.71	1079057.97	1079620.26
47	98708.97	616282.72	624343.16	999435.66	1078978.00	1079542.34
46	98704.31	615150.85	623225.94	999433.61	1078898.16	1076464.55
45	98699.64	614023.03	622112.75	999431.56	1078818.47	1079386.98
44	98694.96	612899.23	621003.59	999429.50	1078738.91	10793 09.41
43	98690.27	611779.43	619898.43	999427.43	1078659.49	1079232.05
42	98685.57	610663.60	618797.25	999425.37	1078580.20	1079154.84
41	98680.86	609551.74	617700.03	999423.30	1078501.06	1079077.76
40	98676.15	608443.81	616606.74	999421.22	1078422.05	1079000.83
39	98671.43	607339.79	615517.36	999419.14	1078343.17	1078924.03
38	98666.70	606239.67	614431.89	999417.06	1078264.44	1078847.37
37	98661.96	605143.43	613350.28	999414.98	1078185.83	1078770.86
36	98657.21	604051.03	612272.53	999412.89	1078107.36	1078694.48
35	98652.46	602962.47	611198.61	999410.79	1078029.03	1078618.24
34	98647.70	601877.72	610128.50	999408.70	1077950.83	1078542.13
33	98642.93	600796.76	609062.19	999406.59	1077872.76	1078466.16
32	98638.15	599719.57	607999.64	999404.49	1077794.82	1078390.33
31	98633.36	598646.14	606940.85	999402.38	1077717.02	1078314.64
30	98628.56	597576.44	605885.80	999400.27	1077639.35	1078239.08
29	98623.75	596510.45	604834.45	999398.15	1077561.81	1078163.65
28	98618.94	595448.15	603786.80	999396.03	1077484.39	1078088.36
27	98614.12	594389.52	602742.82	999393.91	1077407.11	1078013.20
26	98609.29	593334.55	601702.50	999391.78	1077329.96	1077938.18
25	98604.45	592283.22	600665.81	999389.65	1077252.94	1077863.29
24	98599.60	591235.50	599632.74	999387.52	1077176.05	1077788.53
23	98594.74	590191.38	598603.26	999385.38	1077099.29	1077713.91
22	98589.88	589150.84	597577.37	999383.24	1077022.65	1077639.41
21	98585.01	588113.86	596555.04	999381.09	1076946.14	1077565.05
20	98580.13	587080.42	595536.25	999378.94	1076869.76	1077490.82
19	98575.24	586050.51	594520.98	999376.79	1076793.50	1077416.72
18	98570.34	585024.10	593509.22	999374.63	1076717.38	1077342.75
17	98565.44	584001.17	592500.95	999372.47	1076641.37	1077268.90
16	98560.53	582981.72	591496.14	999370.30	1076565.49	1077195.19
15	98555.61	581965.72	590494.79	999368.13	1076489.74	1077121.61
14	98550.68	580953.15	589496.88	999365.96	1076414.11	1087048.15
13	98545.74	579944.00	588502.38	999363.78	1076338.61	1076974.82
12	98540.79	578938.25	587511.28	999361.60	1076263.22	1076901.62
11	98535.83	577935.88	586523.56	999359.42	1076187.97	1076828.55
10	98530.87	576936.88	585539.20	999357.23	1076112.83	1076755.60
9	98525.90	575941.22	584558.20	999355.04	1076037.82	1076682.78
8	98520.92	574948.89	583580.53	999352.85	1075962.92	1076610.08
7	98515.93	573959.88	582606.17	999350.65	1075888.15	1076537.51
6	98510.93	572974.16	581635.10	999348.44	1075813.50	1076465.06
5	98505.92	571991.73	580667.32	999346.24	1075738.97	1076392.74
4	98500.91	571012.56	579702.80	999344.03	1075664.57	1076320.54
3	98495.89	570036.62	578741.53	999341.81	1075590.28	1076248.47
2	98490.86	569063.94	577783.50	999339.59	1075516.11	1076176.51
1	98485.82	568094.46	576828.67	999337.37	1075442.06	1076104.68
0	98480.77	567128.18	575877.05	999335.15	1075368.12	1076032.98

10	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0	17364.82	17632.70	101542.67	923967.02	924631.88	1000664.85
1	17393.46	17662.69	101547.88	924038.61	924705.69	1000667.08
2	17422.11	17692.69	101553.10	924110.07	924779.39	1000669.32
3	17450.75	17722.69	101558.33	924181.41	924852.97	1000671.55
4	17479.39	17752.69	101563.57	924252.64	924926.43	1000673.79
5	17508.03	17782.70	101568.82	924323.74	924999.78	1000676.04
6	17536.67	17812.71	101574.08	924394.72	925073.01	1000678.29
7	17565.31	17842.72	101579.35	924465.58	925146.12	1000680.54
8	17593.95	17872.74	101584.63	924536.32	925219.12	1000682.80
9	17622.58	17902.76	101589.92	924606.95	925292.00	1000685.06
10	17651.21	17932.78	101595.21	924677.46	925364.77	1000687.32
11	17679.84	17962.81	101600.51	924747.84	925437.43	1000689.59
12	17708.47	17992.84	101605.82	924818.11	925509.97	1000691.86
13	17737.10	18022.87	101611.14	924888.27	925582.40	1000694.13
14	17765.73	18052.91	101616.47	924958.30	925654.72	1000696.41
15	17794.35	18082.95	101621.81	925028.22	925726.92	1000698.69
16	17822.98	18112.99	101627.16	925098.03	925799.01	1000700.98
17	17851.60	18143.03	101632.52	925167.72	925870.99	1000703.27
18	17880.22	18173.08	101637.89	925237.29	925942.85	1000705.56
19	17908.84	18203.13	101643.27	925306.75	926014.61	1000707.86
20	17937.46	18233.18	101648.66	925376.09	926086.25	1000710.16
21	17966.07	18263.24	101654.06	925445.32	926157.79	1000712.47
22	17994.69	18293.30	101659.46	925514.44	926229.21	1000714.78
23	18023.30	18323.36	101664.87	925583.44	926300.53	1000717.09
24	18051.91	18353.43	101670.29	925652.33	926371.73	1000719.41
25	18080.52	18383.50	101675.72	925721.10	926442.83	1000721.73
26	18109.13	18413.57	101681.16	925789.77	926513.82	1000724.05
27	18137.74	18443.65	101686.61	925858.32	926584.70	1000726.38
28	18166.35	18473.73	101692.07	925926.76	926655.47	1000728.71
29	18194.95	18503.81	101697.54	925995.09	926726.13	1000731.05
30	18223.55	18533.90	101703.02	926063.30	926796.69	1000733.39
31	17252.15	18563.99	101708.51	926131.41	986867.14	1000735.73
32	18280.75	18594.08	101714.01	926199.41	926937.49	1000738.08
33	18309.35	18624.18	101719.52	926267.29	927007.72	1000740.43
34	18337.95	18654.28	101725.04	926335.07	927077.86	1000742.78
35	18366.54	18684.38	101730.56	926402.74	927147.88	1000745.14
36	18395.13	18714.49	101736.09	926470.30	927217.80	1000747.50
37	18423.73	18744.60	101741.63	926537.75	927287.62	1000749.87
38	18452.32	18774.71	101747.18	926605.09	927357.33	1000752.24
39	18480.91	18804.83	101752.74	926672.32	927426.94	1000754.61
40	18509.49	18834.95	101758.31	926739.45	927496.44	1000756.99
41	18538.08	18865.07	101763.89	926806.47	927565.84	1000759.37
42	18566.66	18895.20	101769.48	926873.38	927635.14	1000761.76
43	18595.24	18925.33	101775.08	926940.19	927704.34	1000764.15
44	18623.82	18955.46	101780.69	927006.89	927773.43	1000766.54
45	18652.40	18985.59	101786.31	927073.48	927842.42	1000768.94
46	18680.98	19015.73	101791.94	927139.97	927911.31	1000771.34
47	18709.56	19045.87	101797.58	927206.35	927980.09	1000773.74
48	18738.13	19076.02	101803.22	927272.63	928048.78	1000776.15
49	18766.70	19106.17	101808.87	927338.80	928117.36	1000778.56
50	18795.27	19136.32	101814.53	927404.87	928185.85	1000780.98
51	18823.84	19166.48	101820.20	927470.83	928254.23	1000783.40
52	18852.41	19196.64	101825.88	927536.69	928322.51	1000785.82
53	18880.98	19226.80	101831.57	927602.45	928390.70	1000788.25
54	18909.54	19256.96	101837.27	927668.11	928458.78	1000790.68
55	18938.11	19287.13	101842.98	927733.66	928526.77	1000793.11
56	18966.67	19317.30	101848.70	927799.11	928594.66	1000795.55
57	18995.23	19347.48	101854.43	927864.45	928662.45	1000797.99
58	19023.79	19377.66	101860.17	927929.70	928730.14	1000800.44
59	19052.34	19407.84	101865.92	927994.84	928797.73	1000802.89
60	19080.90	19438.03	101871.68	928059.88	928865.23	1000805.34

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tamologarith. pro Secante
60	98480.77	567128.18	575877.95	999335.15	1075368.12	1076032.98
59	98475.71	566165.09	574928.61	999332.92	1075294.31	1075961.39
58	98470.65	565205.16	573983.33	999330.68	1075220.61	1075889.93
57	98465.58	564248.38	573041.21	999328.45	1075147.03	1075818.59
56	98460.50	563294.74	572102.23	999326.21	1075073.57	1075747.36
55	98455.41	562344.21	571166.36	999323.96	1075000.22	1075676.26
54	98450.31	561396.80	570233.60	999321.71	1074926.99	1075605.28
53	98445.21	560452.47	569303.93	999319.46	1074853.88	1075534.42
52	98440.10	559511.21	568377.34	999317.20	1074780.88	1075463.68
51	98434.98	558573.02	567453.80	999314.94	1074708.00	1075393.05
50	98429.85	557637.86	566533.31	999312.68	1074635.23	1075322.54
49	98424.71	556705.74	565615.84	999310.41	1074562.57	1075252.16
48	98419.56	555776.63	564701.40	999308.14	1074490.03	1075181.89
47	98414.40	554850.52	563789.95	999305.87	1074417.60	1075111.73
46	98409.24	553927.40	562881.48	999303.59	1074345.28	1075041.70
45	98404.07	553007.24	561975.99	999301.31	1074273.08	1074971.78
44	98398.89	552090.05	561073.45	999299.02	1074200.99	1074901.97
43	98393.70	551175.79	560173.86	999296.73	1074129.01	1074832.28
42	98388.50	550264.46	559277.19	999294.44	1074057.15	1074762.71
41	98383.29	549356.04	558383.43	999292.14	1073985.39	1074693.25
40	98378.08	548450.52	557492.58	999289.84	1073913.75	1074623.91
39	98372.86	547547.88	556604.60	999287.53	1073842.21	1074554.68
38	98367.63	546648.12	555719.50	999285.22	1073770.79	1074485.56
37	98362.39	545751.21	554837.26	999282.91	1073699.47	1074416.56
36	98357.14	544857.15	553957.86	999280.59	1073628.27	1074347.67
35	98351.89	543965.92	553081.29	999278.27	1073557.17	1074278.90
34	98346.63	543077.50	552207.54	999275.95	1073486.18	1074210.23
33	98341.36	542191.88	551336.59	999273.62	1073415.30	1074141.68
32	98336.08	541309.06	550468.43	999271.29	1073344.53	1074073.24
31	98330.79	540429.01	549603.05	999268.95	1073273.87	1074004.91
30	98325.49	539551.72	548740.43	999266.61	1073203.31	1073936.70
29	98320.18	538677.18	547880.55	999264.27	1073132.86	1073868.59
28	98314.87	537805.38	547023.42	999261.92	1073062.51	1073800.59
27	98309.55	536936.30	546169.01	999259.57	1072992.28	1073732.71
26	98304.22	536069.93	545317.31	999257.22	1072922.14	1073664.93
25	98298.88	535206.26	544468.31	999254.86	1072852.12	1073597.26
24	98293.53	534345.27	543621.99	999252.50	1072782.20	1073529.70
23	98288.17	533486.96	542778.35	999250.13	1072712.38	1073462.25
22	98282.81	532631.31	541937.37	999247.76	1072642.67	1073394.91
21	98277.44	531778.30	541099.03	999245.39	1072573.06	1073327.68
20	98272.06	530927.93	540263.33	999243.01	1072503.56	1073260.55
19	98266.67	530080.18	539430.26	999240.63	1072434.16	1073193.53
18	98261.27	529235.05	538599.79	999238.24	1072364.86	1073126.62
17	98255.87	528392.51	537771.92	999235.85	1072295.66	1073059.81
16	98250.46	527552.55	536946.64	999233.46	1072226.57	1072993.11
15	98245.04	526715.17	536123.93	999231.06	1072157.58	1072926.52
14	98239.61	525880.35	535303.79	999228.66	1072088.69	1072860.03
13	98234.17	525048.09	534486.20	999226.26	1072019.91	1072793.65
12	98228.72	524218.36	533671.14	999223.85	1071951.22	1072727.37
11	98223.27	523391.16	532858.61	999221.44	1071882.64	1072661.20
10	98217.81	522566.47	532048.60	999219.02	1071814.15	1072595.13
9	98212.34	521744.28	531241.09	999216.60	1071745.77	1072529.17
8	98206.86	520924.59	530436.08	999214.18	1071677.49	1072463.31
7	98201.37	520107.38	529633.54	999211.75	1071609.30	1072397.55
6	98195.87	519292.64	528833.47	999209.32	1071541.22	1072331.89
5	98190.36	518480.35	528035.87	999206.89	1071473.23	1072266.34
4	98184.85	517670.51	527240.70	999204.45	1071405.34	1072200.89
3	98179.33	516863.11	526447.98	999202.01	1071337.55	1072135.55
2	98173.80	516058.13	525657.68	999199.56	1071269.86	1072070.30
1	98168.26	515255.57	524869.79	999197.11	1071202.27	1072005.16
0	98162.71	514455.40	524084.31	999194.66	1071134.77	1071940.12

I I ′	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tăgente	Tomologarith. pro Secante
0	19080. 90	19438. 03	101871. 68	928059. 88	928865. 23	1000805. 34
1	19109. 45	19468. 22	101877. 44	928124. 83	928932. 63	1000807. 80
2	19138. 00	19498. 41	101883. 21	928189. 67	928999. 93	1000810. 26
3	19166. 55	19528. 61	101888. 99	928254. 41	929067. 13	1000812. 73
4	19195. 10	19558. 81	101894. 78	928319. 05	929134. 24	1000815. 20
5	19223. 65	19589. 01	101900. 58	928383. 59	929201. 26	1000817. 67
6	19252. 20	19619. 22	101906. 39	928448. 03	929268. 17	1000820. 14
7	19280. 74	19649. 43	101912. 21	928512. 37	929335. 00	1000822. 63
8	19309. 28	19679. 64	101918. 04	928576. 61	929401. 72	1000825. 11
9	19337. 82	19709. 86	101923. 88	928640. 76	929468. 36	1000827. 60
10	19366. 36	19740. 08	101929. 73	928704. 80	929534. 89	1000830. 09
11	19394. 90	19770. 30	101935. 59	928768. 75	949601. 34	1000832. 59
12	19423. 44	19800. 53	101941. 46	928832. 60	929667. 69	1000835. 08
13	19451. 97	19830. 76	101947. 34	928896. 36	929733. 95	1000837. 59
14	19480. 50	19861. 00	101953. 23	928960. 01	929800. 11	1000840. 1
15	19509. 03	19891. 24	101959. 12	929023. 57	929866. 18	1000842. 61
16	19537. 56	19921. 48	101965. 02	929087. 04	929932. 16	1000845. 12
17	19566. 09	19951. 72	101970. 93	929150. 40	929998. 04	1000847. 64
18	19594. 61	19981. 97	101976. 85	929213. 67	930063. 83	1000850. 16
19	19623. 14	20012. 22	101982. 78	929276. 85	930129. 54	1000852. 69
20	19651. 66	20042. 48	101988. 72	929339. 93	930195. 14	1000855. 2
21	19680. 18	20072. 74	101994. 67	929402. 91	930260. 66	1000857. 75
22	19708. 70	20103. 00	102000. 63	929465. 80	930326. 09	1000860. 29
23	19737. 22	20133. 27	102006. 60	929528. 59	930391. 43	1000862. 83
24	19765. 73	20163. 54	102012. 58	929591. 29	930456. 67	1000865. 38
25	19794. 25	20193. 81	102018. 57	929653. 90	930521. 83	1000867. 93
26	19822. 76	20224. 09	102024. 57	929716. 41	930586. 89	1000870. 4
27	19851. 27	20254. 37	102030. 58	929778. 83	930651. 87	1000873. 04
28	19879. 78	20284. 65	102036. 60	929841. 16	930716. 75	1000875. 60
29	19908. 29	20314. 94	102042. 63	929903. 39	930781. 55	1000878. 16
30	19936. 79	20345. 23	102048. 67	929965. 53	930846. 26	1000880. 73
31	19965. 30	20375. 52	102054. 71	930027. 58	930910. 88	1000883. 30
32	19993 80	20405. 82	102060. 76	930089. 53	930975. 41	1000885. 8
33	20022. 30	20436. 12	102066. 82	930151. 40	931039. 85	1000888. 46
34	20052. 80	20466. 43	102072. 89	930213. 17	931104. 21	1000891. 04
35	20079. 30	20496. 74	102078. 97	930274. 85	931168. 48	1000893. 63
36	20107. 79	20527. 05	102085. 06	930336. 44	931232. 66	1000896. 22
37	20136. 29	20557. 37	102091. 16	930397. 94	931296. 75	1000898. 81
38	20164. 78	20587. 69	102097. 27	930459. 34	931360. 76	1000901. 4
39	20193. 27	20618. 01	102103. 39	930520. 66	931424. 68	1000904. 0
40	20221. 76	20648. 34	102109. 52	930581. 89	931488. 51	1000906. 62
41	20250. 24	20678. 67	102115. 66	930643. 03	931552. 26	1000909. 23
42	20278. 73	20709. 00	102121. 81	930704. 07	931615. 92	1000911. 85
43	20307. 21	20739. 34	102127. 97	930765. 03	931679. 50	1000914. 47
44	20335. 69	20769. 68	102134. 14	930825. 90	931742. 99	1000917. 09
45	20364. 17	20800. 03	102140. 32	930886. 68	931806. 40	1000919. 71
46	20392. 65	20830. 38	102146. 50	930947. 37	931869. 72	1000922. 34
47	20421. 13	20860. 73	102152. 69	931007. 98	931932. 95	1000924. 98
48	20449. 61	20891. 09	102158. 89	931068. 49	931996. 11	1000927. 61
49	20478. 08	20921. 45	102165. 10	931128. 92	932059. 18	1000930. 26
50	20506. 55	20951. 81	102171. 32	931189. 26	932122. 16	1000932. 90
51	20535. 02	20982. 18	102177. 55	931249. 51	932185. 06	1000935. 55
52	20563. 49	21012. 55	102183. 79	931309. 68	932247. 88	1000938. 20
53	20591. 95	21042. 93	102190. 04	931369. 76	932310. 61	1000940. 86
54	20620. 42	21073. 31	102196. 30	931429. 75	932373. 27	1000943. 52
55	20648. 88	21103. 69	102202. 57	931489. 65	932435. 84	1000946. 18
56	20677. 34	21134. 07	102208. 85	931549. 47	932498. 32	1000948. 85
57	20705. 80	21164. 46	102215. 14	931609. 21	932560. 73	1000951. 52
58	20734. 26	21194. 85	102221. 44	931668. 85	932623. 05	1000954. 20
59	20762. 71	21225. 25	102227. 75	931728. 41	932685. 29	1000956. 88
60	20791. 17	21255. 65	102234. 07	931787. 89	932747. 45	1000959. 56

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
60	98162.71	514455.40	524084.31	999194.66	1071134.77	1071940.12
59	98157.16	513657.63	523301.21	999192.20	1071067.37	1071875.17
58	98151.60	512862.24	522520.50	999189.74	1071000.07	1071810.33
57	98146.03	512069.21	521742.16	999187.27	1070932.87	1071745.59
56	98140.45	511278.55	520966.18	999184.80	1070865.76	1071680.95
55	98134.86	510490.24	520192.54	999182.33	1070798.74	1071616 41
54	98129.26	509704.26	519421.25	999179.86	1070731.83	1071551.97
53	98123.66	508920.61	518652.28	999177.37	1070665.00	1071487.63
52	98118.05	508139.28	517885.63	999174.89	1070598.28	1071423.39
51	98112.43	507360.25	517121.28	999172.40	1070531.64	1071359.24
50	98106.80	506583.52	516359.24	999169.91	1070465.11	1071295.20
49	98101.16	505809.07	515599.48	999167.41	1070398.66	1071231.25
48	98095.51	505036.90	514841.99	999164.92	1070332.31	1071167.40
47	98089.86	504267.00	514086.77	999162.41	1070266.05	1071103.64
46	98084.20	503499.35	513333.81	999159.90	1070199.89	1071039.99
45	98078.53	502733.95	512583.09	999157.39	1070133.82	1070976.43
44	98072.85	501970.78	511834.61	999154.88	1070067.84	1070912.96
43	98067.16	501209.84	511088.35	999152.36	1070001.96	1070849.60
42	98061.46	500451.11	510344.31	999149.84	1069936.17	1070786.33
41	98055.76	499694.59	509602.48	999147.31	1069870.46	1070723.15
40	98050.05	498940.27	508862.84	999144.78	1069804.86	1070660.07
39	98044.33	498188.13	508125.39	999142.25	1069739.34	1070597.09
38	98038.60	497438.17	507390.12	999139.71	1069673.91	1070534.20
37	98032.86	496690.37	506657.01	999137.17	1069608.57	1070471.41
36	98027.11	495944.74	505926.06	999134.62	1069543.33	1070408.71
35	98021.36	495201.25	505197.26	999132.07	1069478.17	1070346.10
34	98015.60	494459.90	504470.60	999129.52	1069413.11	1070283.59
33	98009.83	493720.68	503746.07	999126.96	1069348.13	1070221.17
32	98004.05	492983.58	503023.67	999124.40	1069283.25	1070158.84
31	97998.26	492248.59	502303.37	999121.84	1069218.45	1070096.61
30	97992.47	491515.70	501585.17	999119.27	1069153.74	1070034.47
29	97986.67	490784.91	500869.07	999116.70	1069089.12	1069972.42
28	97980.86	490056.20	500155.05	999114.12	1069024.59	1069910.47
27	97975.04	489329.56	499443.11	999111.54	1068960.15	1069848.60
26	97969.21	488604.99	498733.23	999108.96	1068895.79	1069786.83
25	97963.37	487882.48	498025.41	999106.37	1068831.52	1069725.15
24	97957.52	487162.01	497319.64	999103.78	1068767.34	1069663.56
23	97951.67	486443.59	496615.91	999101.19	1068703.25	1069602.06
22	97945.81	485727.19	495914.21	999098.59	1068639.24	1069540.66
21	97939.94	485012.82	495214.53	999095.98	1068575.32	1069479.34
20	97934.06	484300.45	494516.87	999093.38	1068511.49	1069418.11
19	97928.17	483590.10	493821.20	999090.77	1068447.74	1069356.97
18	97922.28	482881.74	493127.54	999088.15	1068384.08	1069295.93
17	97916.38	482175.36	492435.86	999085.53	1068320.50	1069234.97
16	97910.47	481470.96	491746.16	999082.91	1068257.01	1069174.10
15	97904.55	480768.54	491058.44	999080.29	1068193.60	1069113.32
14	97898.62	480068.08	490372.67	999077.66	1068130.28	1069052.63
13	97892.68	479369.57	489688.86	999075.02	1068067.05	1068992.02
12	97886.74	478673.00	489007.00	999072.39	1068003.89	1068931.51
11	97880.79	477978.37	488327.07	999069.74	1067940.82	1068871.08
10	97874.83	477285.67	487649.07	999067.10	1067877.84	1068810.74
9	97868.86	476594.90	486972.99	999064.45	1067814.94	1068750.49
8	97862.88	475906.03	486298.83	999061.80	1067752.12	1068690.32
7	97856.89	475219.07	485626.57	999059.14	1067689.39	1068630.24
6	97850.90	474534.01	484956.21	999056.48	1067626.73	1068570.25
5	97844.90	473850.83	484287.74	999053.82	1067564.16	1068510.35
4	97838.89	473169.54	483621.14	999051.15	1067501.68	1068450.53
3	97832.87	472490.12	482956.43	999048.48	1067439.27	1068390.79
2	97826.84	471812.56	482293.57	999045.80	1067376.95	1068331.15
1	97820.80	471136.86	481632.58	999043.12	1067314.71	1068271.59
0	97814.76	470463.01	480973.43	999040.44	1067252.55	1068212.11

12	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0	20491.17	21255.65	102234.07	931787.89	932747.45	1000959.56
1	20819.62	21286.06	102240.40	931847.28	932809.53	1000962.25
2	20848.07	21316.47	102246.73	931906.59	932871.53	1000964.94
3	20876.52	21346.88	102253.07	931965.81	932933.45	1000967.63
4	20904.97	21377.30	102259.42	932024.95	932995.28	1000970.33
5	20933.41	21407.72	102265.78	932084.00	933057.04	1000973.03
6	20961.86	21438.14	102272.15	932142.97	933118.72	1000975.74
7	20990.30	21468.57	102278.53	932201.86	933180.31	1000978.45
8	21018.74	21499.00	102284.92	932260.66	933241.83	1000981.17
9	21047.18	21529.44	102291.32	932319.38	933303.27	1000983.88
10	21075.61	21559.88	102297.73	932378.02	933364.63	1000986.61
11	21104.05	21590.32	102304.15	932436.57	933425.91	1000989.33
12	21132.48	21620.77	102310.58	932495.05	933487.11	1000992.06
13	21160.91	21651.22	102317.02	932553.44	933548.23	1000994.79
14	21189.34	21681.67	102323.47	932611.74	933609.27	1000997.53
15	21217.77	21712.13	102329.93	932669.97	933670.24	1001000.27
16	21246.19	21742.59	102336.40	932728.11	933731.13	1001003.02
17	21274.62	21773.06	102342.88	932786.17	933791.94	1001005.77
18	21303.04	21803.53	102349.37	932844.16	933852.67	1001008.52
19	21331.46	21834.00	102355.87	932902.06	933913.33	1001011.27
20	21359.88	21864.48	102362.38	932959.88	933973.91	1001014.03
21	21388.29	21894.96	102368.90	933017.61	934034.41	1001016.80
22	21416.71	21925.44	102375.43	933075.27	934094.84	1001019.57
23	21445.12	21955.93	102381.96	933132.85	934155.19	1001022.34
24	21473.53	21986.42	102388.50	933190.35	934215.46	1001025.11
25	21501.94	22016.92	102395.05	933247.77	934275.66	1001027.89
26	21530.35	22047.42	102401.61	933305.11	934335.78	1001030.68
27	21558.76	22077.93	102408.18	933362.37	934395.83	1001033.46
28	21587.16	22108.44	102414.76	933419.55	934455.80	1001036.26
29	21615.56	22138.95	102421.35	933476.65	934515.70	1001039.05
30	21643.96	22169.47	102427.95	933533.68	934575.52	1001041.85
31	21672.36	22199.99	102434.56	933590.62	934635.27	1001044.65
32	21700.76	22230.51	102441.18	933647.49	934694.94	1001047.46
33	21729.15	22261.04	102447.81	933704.28	934754.54	1001050.27
34	21757.54	22291.57	102454.45	933760.99	934814.07	1001053.08
35	21785.93	22322.11	102461.10	933817.62	934873.52	1001055.90
36	21814.32	22352.65	102467.76	933874.18	934932.90	1001058.72
37	21842.71	22383.19	102474.43	933930.65	934992.20	1001061.55
38	21871.10	22413.74	102481.11	933987.06	935051.43	1001064.38
39	21899.48	22444.29	102487.80	934043.38	935110.59	1001067.21
40	21927.86	22474.85	102494.49	934099.63	935169.68	1001070.05
41	21956.24	22505.41	102501.19	934155.80	935228.69	1001072.89
42	21984.62	22535.97	102507.90	934211.90	935287.63	1001075.73
43	22013.00	22566.54	102514.62	934267.92	935346.50	1001078.58
44	22041.37	22597.11	102521.35	934323.86	935405.30	1001081.44
45	22069.74	22627.69	102528.09	934379.73	935464.02	1001084.29
46	22098.11	22658.27	102534.84	934435.52	935522.67	1001087.15
47	22126.48	22688.85	102541.60	934491.24	935581.26	1001090.02
48	22154.85	22719.44	102548.37	934546.88	935639.77	1001092.89
49	22183.21	22750.03	102555.15	934602.45	935698.21	1001095.76
50	22211.58	22780.63	102561.94	934657.94	935756.58	1001098.63
51	22239.94	22811.23	102568.74	934713.36	935814.87	1001101.51
52	22268.30	22841.83	102575.55	934768.70	935873.10	1001104.40
53	22296.66	22872.44	102582.37	934823.97	935931.26	1001107.29
54	22325.01	22903.05	102589.20	934879.17	935989.35	1001110.18
55	22353.37	22933.67	102596.04	934934.29	936047.36	1001113.07
56	22381.72	22964.29	102602.89	934989.34	936105.31	1001115.97
57	22410.07	22994.92	102609.75	935044.32	936163.19	1001118.87
58	22438.41	23025.55	102616.62	935099.22	936221.00	1001121.78
59	22466.76	23056.18	102623.50	935154.05	936278.74	1001124.69
60	22495.11	23086.82	102630.39	935208.80	936336.41	1001127.61

′	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
60	97814.76	470463.01	480973.43	999040.44	1067252.55	1068212.11
59	97808.71	469791.00	480316.13	999037.75	1067190.47	1068152.72
58	97802.65	469120.83	479660.66	999035.06	1067128.47	1068093.41
57	97796.58	468452.48	479007.02	999032.37	1067066.55	1068034.19
56	97790.50	467785.95	478355.20	999029.67	1067004.72	1067975.05
55	97784.41	467121.24	477705.19	999026.97	1066942.96	1067916.00
54	97778.32	466458.32	477056.99	999024.26	1066881.28	1067857.03
53	97772.22	465797.21	476410.58	999021.55	1066819.69	1067798.14
52	97766.11	465137.88	475765.96	999018.83	1066758.17	1067739.34
51	97759.99	464480.34	475123.12	999016.12	1066696.73	1067680.62
50	97753.86	463824.57	474482.06	999013.39	1066635.37	1067621.98
49	97747.73	463170.56	473842.77	999010.67	1066574.09	1067563.43
48	97741.59	462518.32	473205.23	999007.94	1066512.89	1067504.95
47	97735.44	461867.83	472569.45	999005.21	1066451.77	1067446.56
46	97729.28	461219.08	471935.42	999002.47	1066390.73	1067388.26
45	97723.11	460572.07	471303.13	998999.73	1066329.76	1067330.03
44	97716.93	459926.80	470672.56	998996.98	1066268.87	1067271.89
43	97710.75	459283.25	470043.72	998994.23	1066208.06	1067213.83
42	97704.56	458641.41	469416.60	998991.48	1066147.33	1067155.84
41	97698.36	458001.29	468791.19	998988.73	1066086.67	1067097.94
40	97692.15	457362.87	468167.48	998985.97	1066026.09	1067040.12
39	97685.93	456726.14	467545.48	998983.20	1065965.59	1066982.39
38	97679.70	456091.11	466925.16	998980.43	1065905.16	1066924.73
37	97673.47	455457.76	466306.52	998977.66	1065844.81	1066867.15
36	97667.23	454826.08	465689.56	998974.89	1065784.54	1066809.65
35	97660.98	454196.08	465074.27	998972.11	1065724.34	1066752.23
34	97654.72	453567.73	464460.64	998969.32	1065664.22	1066694.89
33	97648.45	452941.05	463848.67	998966.54	1065604.17	1066637.63
32	97642.17	452316.01	463238.35	998963.74	1065544.20	1066580.45
31	97635.89	451692.61	462629.67	998960.95	1065484.30	1066523.35
30	97629.60	451070.85	462022.63	998958.15	1065424.48	1066466.32
29	97623.30	450450.72	461417.22	998955.35	1065364.73	1066409.38
28	97616.99	449832.21	460813.43	998952.54	1065305.06	1066352.51
27	97610.67	449215.32	460211.26	998949.73	1065245.46	1066295.72
26	97604.35	448600.04	459610.70	998946.92	1065185.93	1066239.01
25	97598.02	447986.36	459011.74	998944.10	1065126.48	1066182.38
24	97591.68	447374.28	458414.39	998941.28	1065067.10	1066125.82
23	97585.33	446763.79	457818.62	998938.45	1065007.80	1066069.35
22	97578.97	446154.89	457224.44	998935.62	1064948.57	1066012.94
21	97572.60	445547.56	456631.83	998932.79	1064889.41	1065956.62
20	97566.23	444941.81	456040.80	998929.95	1064830.32	1065900.37
19	97559.85	444337.62	455451.34	998927.11	1064771.31	1065844.20
18	97553.46	443734.99	454863.44	998924.27	1064712.37	1065788.10
17	97547.06	443133.92	454277.09	998921.42	1064653.50	1065732.08
16	97540.65	442534.39	453692.29	998918.56	1064594.70	1065676.14
15	97534.23	441936.41	453109.03	998915.71	1064535.98	1065620.27
14	97527.81	441339.96	452527.30	998912.85	1064477.33	1065564.48
13	97521.38	440745.04	451947.11	998909.98	1064418.74	1065508.76
12	97514.94	440151.64	451368.44	998907.11	1064360.23	1065453.12
11	97508.49	439559.76	450791.29	998904.24	1064301.79	1065397.55
10	97502.03	438969.40	450215.65	998901.37	1064243.42	1065342.06
9	97495.56	438380.54	449641.52	998898.49	1064185.13	1065286.64
8	97489.09	437793.17	449068.89	998895.60	1064126.90	1065231.30
7	97482.61	437207.31	448497.75	998892.71	1064068.74	1065176.03
6	97476.12	436622.93	447928.10	998889.82	1064010.65	1065120.83
5	97469.62	436040.03	447359.93	998886.93	1063952.64	1065065.71
4	97463.11	435458.61	446793.24	998884.03	1063894.69	1065010.66
3	97456.60	434878.66	446228.03	998881.13	1063836.81	1064955.68
2	97450.08	434300.18	445664.28	998878.22	1063779.00	1064900.78
1	97443.55	433723.16	445101.98	998875.31	1063721.26	1064845.95
0	97437.01	433147.59	444541.15	998872.39	1063663.59	1064791.20

13	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0	22495. 11	23086. 82	102630. 39	935208. 80	936336. 41	1001127. 61
1	22523. 45	23117. 46	102637. 29	935263. 49	936394. 01	1001130. 53
2	22551. 79	23148. 11	102644. 20	935318. 10	936451. 55	1001133. 45
3	22580. 13	23178. 76	102651. 12	935372. 64	936509. 01	1001136. 37
4	22608. 46	23209. 41	102658. 05	935427. 10	936566. 41	1001139. 30
5	22636. 80	23240. 07	102664. 99	935481. 50	936623. 74	1001142. 24
6	22665. 13	23270. 73	102671. 94	935535. 82	936681. 00	1001145. 18
7	22693. 46	23301. 40	102678. 90	935590. 07	936738. 19	1001148. 12
8	22721. 79	23332. 07	102685. 87	935644. 26	936795. 32	1001151. 06
9	22750. 12	23362. 74	102692. 84	935698. 36	936852. 38	1001154. 01
10	22778. 44	23393. 42	102699. 82	935752. 40	936909. 37	1001156. 97
11	22806. 77	23424. 10	102706. 81	935806. 37	936966. 29	1001159. 92
12	22835. 09	23454. 79	102713. 81	935860. 27	937023. 15	1001162. 88
13	22863. 41	23485. 48	102720. 82	935914. 09	937079. 94	1001165. 85
14	22891. 72	23516. 17	102727. 84	935967. 85	937136. 67	1001168. 82
15	22920. 04	23546. 87	102734. 87	936021. 54	937193. 33	1001171. 79
16	22948. 35	23577. 58	102741. 91	936075. 15	937249. 92	1001174. 77
17	22976. 66	23608. 29	102748. 96	936128. 70	937306. 45	1001177. 75
18	23004. 97	23639. 00	102756. 02	936182. 17	937362. 91	1001180. 73
19	23033. 28	23669. 72	102763. 09	936235. 58	937419. 30	1001183. 72
20	23061. 59	23700. 44	102770. 17	936288. 92	937475. 63	1001186. 71
21	23089. 89	23731. 16	102777. 26	936342. 19	937531. 90	1001189. 71
22	23118. 19	23761. 89	102784. 36	936395. 39	937588. 10	1001192. 71
23	23146. 49	23792. 62	102791. 47	936448. 52	937644. 23	1001195. 71
24	23174. 79	23823. 36	102798. 59	936501. 58	937700. 30	1001198. 72
25	23203. 09	23854. 10	102805. 72	936554. 58	937756. 31	1001201. 73
26	23231. 38	23884. 85	102812. 86	936607. 50	937812. 25	1001204. 75
27	23259. 67	23915. 60	102820. 01	936660. 36	937868. 13	1001207. 77
28	23287. 96	23946. 35	102827. 17	936713. 15	937923. 94	1001210. 79
29	23316. 25	23977. 11	102834. 34	936765. 87	937979. 69	1001213. 82
30	23344. 54	24007. 87	102841. 52	936818. 53	938035. 37	1001216. 85
31	23372. 82	24038. 64	102848. 71	936871. 11	938091. 00	1001219. 88
32	23401. 10	24069. 41	102855. 91	936923. 63	938146. 55	1001222. 92
33	23429. 38	24100. 19	102863. 12	936976. 08	938202. 05	1001225. 96
34	23457. 66	24130. 97	102870. 34	937028. 47	938257. 48	1001229. 01
35	23485. 94	24161. 76	102877. 57	937080. 79	938312. 85	1001232. 06
36	23514. 21	24192. 55	102884. 81	937133. 04	938368. 16	1001235. 12
37	23542. 48	24223. 34	102892. 06	937185. 23	938423. 40	1001238. 17
38	23570. 75	24254. 14	102899. 32	937237. 35	938478. 58	1001241. 24
39	23599. 02	24284. 94	102906. 58	937289. 40	938533. 70	1001244. 30
40	23627. 29	24315. 75	102913. 85	937341. 39	938588. 76	1001247. 37
41	23655. 55	24346. 56	102921. 13	937393. 31	938643. 76	1001250. 45
42	23683. 81	24377. 37	102928. 42	937445. 17	938698. 69	1001253. 52
43	23712. 07	24408. 19	102935. 72	937496. 96	938753. 56	1001256. 61
44	23740. 33	24439. 01	102943. 03	937548. 68	938808. 37	1001259. 69
45	23768. 59	24469. 84	102950. 35	937600. 34	938863. 12	1001262. 78
46	23796. 84	24500. 67	102957. 68	937651. 94	938917. 81	1001265. 87
47	23825. 10	24531. 51	102965. 02	937703. 47	938972. 44	1001268. 97
48	23853. 35	24562. 35	102972. 37	937754. 93	939027. 00	1001272. 07
49	23881. 59	24593. 20	102979. 73	937806. 33	939081. 51	1001275. 18
50	23909. 84	24624. 05	102987. 10	937857. 67	939135. 95	1001278. 29
51	23938. 08	24654. 91	102994. 48	937908. 94	939190. 34	1001281. 40
52	23966. 33	24685. 77	103001. 87	937960. 15	939244. 66	1001284. 51
53	23994. 57	24716. 63	103009. 27	938011. 29	939298. 93	1001287. 64
54	24022. 80	24747. 50	103016. 68	938062. 37	939353. 13	1001290. 76
55	24051. 04	24778. 37	103024. 10	938113. 39	939407. 27	1001293. 89
56	24079. 27	24809. 25	103031. 53	938164. 34	939461. 36	1001297. 02
57	24107. 51	24840. 13	103038. 97	938215. 23	939515. 38	1001300. 16
58	24135. 74	24871. 02	103046. 42	938266. 05	939569. 35	1001303. 30
59	24163. 96	24901. 91	103053. 88	938316. 82	939623. 26	1001306. 44
60	24192. 19	24932. 80	103061. 35	938367. 52	939677. 11	1001309. 59

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
60	97437.01	433147.59	444541.15	998872.39	1063663.59	1064791.20
59	97430.46	432573.47	443981.76	998869.47	1063605.99	1064736.51
58	97423.90	432000.79	443423.82	998866.55	1063548.45	1064681.90
57	97417.34	431429.55	442867.31	998863.63	1063490.99	1064627.36
56	97410.77	430859.74	442312.24	998860.70	1063433.59	1064572.90
55	97404.19	430291.36	441758.59	998857.76	1063376.26	1064518.50
54	97397.60	429724.40	441206.37	998854.82	1063319.00	1064464.18
53	97391.00	429158.85	440655.56	998851.88	1063261.81	1064409.93
52	97384.39	428594.72	440106.16	998848.94	1063204.68	1064355.74
51	97377.78	428031.99	439558.17	998845.99	1063147.62	1064301.64
50	97371.16	427470.66	439011.58	998843.03	1063090.63	1064247.60
49	97364.53	426910.72	438466.38	998840.08	1063033.71	1064193.63
48	97357.89	426352.18	437922.57	998837.12	1062976.85	1064139.73
47	97351.24	425795.01	437380.15	998834.15	1062920.06	1064085.91
46	97344.58	425239.23	436839.10	998831.18	1062863.33	1064032.15
45	97337.92	424684.82	436299.43	998828.21	1062806.67	1063978.46
44	97331.25	424131.77	435761.13	998825.23	1062750.08	1063924.85
43	97324.57	423580.09	435224.19	998822.25	1062693.55	1063871.30
42	97317.88	423029.77	434688.61	998819.27	1062637.09	1063817.83
41	97311.18	422480.80	434154.38	998816.28	1062580.70	1063764.42
40	97304.48	421933.18	433621.50	998813.29	1062524.37	1063711.08
39	97297.77	421386.90	433089.96	998810.29	1062468.10	1063657.81
38	97291.05	420841.96	432559.77	998807.29	1062411.90	1063604.61
37	97284.32	420298.35	432030.90	998804.29	1062355.77	1063551.48
36	97277.58	419756.06	431503.36	998801.28	1062299.70	1063498.42
35	97270.84	419215.10	430977.15	998798.27	1062243.69	1063445.42
34	97264.09	418675.46	430452.25	998795.25	1062187.75	1063392.50
33	97257.33	418137.13	429928.67	998792.23	1062131.87	1063339.64
32	97250.56	417600.11	429406.40	998789.21	1062076.06	1063286.85
31	97243.78	417064.40	428885.43	998786.18	1062020.31	1063234.13
30	97236.99	416529.98	428365.76	998783.15	1061964.63	1063181.47
29	97230.19	415996.85	427847.38	998780.12	1061909.00	1063128.89
28	97223.39	415465.01	427330.29	998777.08	1061853.45	1063076.37
27	97216.58	414934.46	426814.49	998774.04	1061797.95	1063023.92
26	97209.76	414405.19	426299.96	998770.99	1061742.52	1062971.53
25	97202.93	413877.19	425786.71	998767.94	1061687.15	1062919.21
24	97196.09	413350.46	425274.74	998764.88	1061631.84	1062866.96
23	97189.25	412824.99	424764.02	998761.83	1061576.60	1062814.77
22	97182.40	412300.79	424254.57	998758.76	1061521.42	1062762.65
21	97175.54	411777.84	423746.37	998755.70	1061466.30	1062710.60
20	97168.67	411256.14	423239.43	998752.63	1061411.24	1062658.61
19	97161.79	410735.69	422733.73	998749.55	1061356.24	1062606.69
18	97154.91	410216.49	422229.28	998746.48	1061301.31	1062554.83
17	97148.02	409698.52	421726.06	998743.39	1061246.44	1062503.04
16	97141.12	409181.78	421224.08	998740.31	1061191.63	1062451.32
15	97134.21	408666.27	420723.33	998737.22	1061136.88	1062399.66
14	97127.29	408151.99	420223.80	998734.13	1061082.19	1062348.06
13	97120.36	407638.92	419725.49	998731.03	1061027.56	1062296.53
12	97113.43	407127.07	419228.40	998727.93	1060973.00	1062245.07
11	97106.49	406616.43	418732.52	998724.82	1060918.49	1062193.67
10	97099.54	406107.00	418237.85	998721.71	1060864.05	1062142.33
9	97092.58	405598.77	417744.38	998718.60	1060809.66	1062091.06
8	97085.61	405091.74	417252.10	998715.49	1060755.34	1062039.85
7	97078.63	404585.90	416761.02	998712.36	1060701.07	1061988.71
6	97071.65	404081.25	416271.14	998709.24	1060646.87	1061937.63
5	97064.66	403577.79	415782.43	998706.11	1060592.73	1061886.61
4	97057.66	403075.50	415294.91	998702.98	1060538.64	1061835.66
3	97050.65	402574.40	414808.56	998699.84	1060484.62	1061784.77
2	97043.63	402074.46	414323.39	998696.70	1060430.65	1061733.95
1	97036.60	401575.70	413839.39	998693.56	1060376.74	1061683.18
0	97029.57	401078.09	413356.55	998690.41	1060322.89	1061632.48

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0	24192. 19	24932. 80	103061. 35	938367. 52	939677. 11	1001309. 59
1	24220. 41	24963. 70	103068. 83	938418. 15	939730. 89	1001312. 74
2	24248. 63	24994. 60	103076. 32	938468. 73	939784. 63	1001315. 90
3	24276. 85	25025. 51	103083. 82	938519. 24	939838. 30	1001319. 06
4	24305. 07	25056. 42	103091. 33	938569. 69	939891. 91	1001322. 22
5	24333. 29	25087. 34	103098. 85	938620. 08	939945. 47	1001325. 39
6	24361. 50	25118. 26	103106. 38	938670. 40	939998. 96	1001328. 56
7	24389. 71	25149. 19	103113. 92	938720. 67	940052. 40	1001331. 73
8	24417. 92	25180. 12	103121. 47	938770. 87	940105. 78	1001334. 91
9	24446. 13	25211. 06	103129. 03	938821. 01	940159. 10	1001338. 09
10	24474. 33	25242. 00	103136. 60	938871. 09	940212. 37	1001341. 28
11	24502. 54	25272. 94	103144. 18	938921. 11	940265. 58	1001344. 47
12	24530. 74	25303. 89	103151. 77	938971. 06	940318. 73	1001347. 67
13	24558. 94	25334. 84	103159. 36	939020. 96	940371. 82	1001350. 87
14	24587. 13	25365. 80	103166. 97	939070. 79	940424. 86	1001354. 07
15	24615. 33	25396. 76	103174. 59	939120. 57	940477. 84	1001357. 27
16	24643. 52	25427. 73	103182. 22	939170. 28	940530. 76	1001360. 48
17	24671. 71	25458. 70	103189. 85	939219. 93	940583. 63	1001363. 70
18	24699. 90	25489. 68	103197. 50	939269. 52	940636. 44	1001366. 92
19	24728. 09	25520. 66	103205. 16	939319. 05	940689. 19	1001370. 14
20	24756. 27	25551. 65	103212. 82	939368. 52	940741. 89	1001373. 37
21	24784. 45	25582. 64	103220. 50	939417. 94	940794. 53	1001376. 60
22	24812. 63	25613. 63	103228. 18	939467. 29	940847. 12	1001379. 83
23	24840. 81	25644. 63	103235. 88	939516. 58	940899. 65	1001383. 07
24	24868. 99	25675. 63	103243. 59	939565. 81	940952. 12	1001386. 31
25	24897. 16	25706. 64	103251. 30	939614. 99	941004. 54	1001389. 55
26	24925. 33	25737. 66	103259. 03	939664. 10	941056. 90	1001392. 80
27	24953. 50	25768. 68	103266. 76	939713. 15	941109. 21	1001396. 06
28	24981. 67	25799. 70	103274. 51	939762. 15	941161. 46	1001399. 31
29	25009. 84	25830. 73	103282. 27	939811. 09	941213. 66	1001402. 58
30	25038. 00	25861. 76	103290. 03	939859. 96	941265. 81	1001405. 84
31	25066. 16	25892. 80	103297. 81	939908. 78	941317. 89	1001409. 11
32	25094. 32	25923. 84	103305. 59	939957. 54	941369. 93	1001412. 38
33	25122. 48	25954. 88	103313. 39	940006. 25	941421. 91	1001415. 66
34	25150. 63	25985. 93	103321. 19	940054. 89	941473. 83	1001418. 94
35	25178. 79	26016. 99	103329. 01	940103. 48	941525. 70	1001422. 23
36	25206. 94	26048. 05	103336. 83	940152. 01	941577. 52	1001425. 51
37	25235. 08	26079. 11	103344. 67	940200. 48	941629. 28	1001428. 81
38	25263. 23	26110. 18	103352. 51	940248. 89	941680. 99	1001432. 10
39	25291. 37	26141. 26	103360. 37	940297. 24	941732. 65	1001435. 40
40	25319. 52	26172. 34	103368. 23	940345. 54	941784. 25	1001438. 71
41	25347. 66	26203. 42	103376. 11	940393. 78	941835. 80	1001442. 02
42	25375. 79	26234. 51	103383. 99	940441. 96	941887. 29	1001445. 33
43	25403. 93	26265. 60	103391. 88	940490. 09	941938. 74	1001448. 65
44	25432. 06	26296. 70	103399. 79	940538. 16	941990. 13	1001451. 97
45	25460. 19	26327. 80	103407. 70	940586. 17	942041. 46	1001455. 29
46	25488. 32	26358. 91	103415. 63	940634. 13	942092. 75	1001458. 62
47	25516. 45	26390. 02	103423. 56	940682. 03	942143. 98	1001461. 95
48	25544. 58	26421. 14	103431. 51	940729. 87	942195. 15	1001465. 29
49	25572. 70	26452. 26	103439. 46	940777. 66	942246. 28	1001468. 62
50	25600. 82	26483. 39	103447. 43	940825. 39	942297. 35	1001471. 97
51	25628. 94	26514. 52	103455. 40	940873. 06	942348. 38	1001475. 32
52	25657. 05	26545. 66	103463. 38	940920. 68	942399. 35	1001478. 67
53	25685. 17	26576. 80	103471. 38	940968. 24	942450. 26	1001482. 02
54	25713. 28	26607. 94	103479. 38	941015. 75	942501. 13	1001485. 38
55	25741. 39	26639. 09	103487. 40	941063. 20	942551. 94	1001488. 75
56	25769. 50	26670. 25	103495. 42	941110. 59	942602. 71	1001492. 11
57	25797. 60	26701. 41	103503. 46	941157. 93	942653. 42	1001495. 48
58	25825. 70	26732. 57	103511. 50	941205. 22	942704. 08	1001498. 86
59	25853. 81	26763. 74	103519. 55	941252. 45	942754. 69	1001502. 24
60	25881. 90	26794. 92	103527. 62	941299. 62	942805. 25	1001505. 62

°	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
60	97029.57	401078.09	413356.55	998690.41	1060322.89	1061632.48
59	97022.53	400581.65	412874.87	998687.26	1060269.11	1061581.85
58	97015.48	400086.36	412394.35	998684.10	1060215.37	1061531.27
57	97008.42	399592.23	411914.98	998680.94	1060161.70	1061480.76
56	97001.35	399099.24	411436.75	998677.78	1060108.09	1061430.31
55	96994.28	398607.39	410959.67	998674.61	1060054.53	1061379.92
54	96987.20	398116.69	410483.74	998671.44	1060001.04	1061329.60
53	96980.11	397627.12	410008.93	998668.27	1059947.60	1061279.33
52	96973.01	397138.68	409535.26	998665.09	1059894.22	1061229.13
51	96965.90	396651.37	409062.72	998661.91	1059840.90	1061178.99
50	96958.79	396165.18	408591.30	998658.72	1059787.63	1061128.91
49	96951.67	395680.11	408121.00	998655.53	1059734.42	1061078.89
48	96944.54	395196.15	407651.81	998652.33	1059681.27	1061028.94
47	96937.40	394713.31	407183.74	998649.13	1059628.18	1060979.04
46	96930.25	394231.57	406716.77	998645.93	1059575.14	1060929.21
45	96923.09	393750.94	406250.91	998642.73	1059522.16	1060879.43
44	96915.92	393271.41	405786.15	998639.52	1059469.24	1060829.72
43	96908.75	392792.97	405322.49	998636.30	1059416.37	1060780.07
42	96901.57	392315.63	404859.92	998633.08	1059363.56	1060730.48
41	96894.38	391839.37	404398.44	998629.86	1059310.81	1060680.95
40	96887.18	391364.20	403938.04	998629.63	1059258.11	1060631.48
39	96879.98	390890.11	403478.72	998623.40	1059205.47	1060582.06
38	96872.77	390417.10	403020.48	998620.17	1059152.88	1060532.71
37	96865.55	389945.16	402563.32	998616.93	1059100.35	1060483.42
36	96858.82	389474.29	402107.22	998613.69	1059047.88	1060434.19
35	96851.08	389004.48	401652.19	998610.45	1058995.46	1060385.01
34	96843.83	388535.74	401198.23	998607.20	1058943.10	1060335.90
33	96836.57	388068.05	400745.32	998603.94	1058890.79	1060286.85
32	96829.31	387601.42	400293.47	998600.69	1058838.54	1060237.85
31	96822.04	387135.84	399842.67	998597.42	1058786.34	1060188.91
30	96814.76	386671.31	399392.92	998594.16	1058734.19	1060140.04
29	96807.47	386207.82	398944.21	998590.89	1058682.11	1060091.22
28	96800.18	385745.37	398496.54	998587.62	1058630.07	1060042.46
27	96792.88	385283.96	398049.91	998584.34	1058578.09	1059993.75
26	96785.57	384823.58	397604.31	998581.06	1058526.17	1059945.11
25	96778.25	384364.24	397159.75	998577.77	1058474.30	1059896.52
24	96770.92	383905.91	396716.21	998574.49	1058422.48	1059847.99
23	96763.58	383448.61	396273.69	998571.19	1058370.72	1059799.52
22	96756.23	382992.33	395832.19	998567.90	1058319.01	1059751.11
21	96748.88	382537.07	395391.71	998564.60	1058267.35	1059702.76
20	96741.52	382082.81	394952.24	998561.29	1058215.75	1059654.46
19	96734.15	381629.57	394513.79	998557.98	1058164.20	1059606.22
18	96726.77	381177.33	394076.33	998554.67	1058112.71	1059558.04
17	96719.38	380726.09	393639.88	998551.35	1058061.26	1059509.91
16	96711.99	380275.85	393204.43	998548.03	1058009.87	1059461.84
15	96704.59	379826.61	392769.97	998544.71	1057958.54	1059413.83
14	96697.18	379378.35	392336.51	998541.38	1057907.25	1059365.87
13	96689.76	378931.09	391904.03	998538.05	1057856.02	1059317.97
12	96682.33	378484.81	391472.54	998534.71	1057804.85	1059270.13
11	96674.90	378039.51	391042.03	998531.38	1057753.72	1059222.34
10	96667.46	377595.19	390612.50	998528.03	1057702.65	1059174.61
9	96660.01	377151.85	390183.95	998524.68	1057651.62	1059126.94
8	96652.55	376709.47	389756.37	998521.33	1057600.65	1059079.32
7	96645.08	376268.07	389329.76	998517.98	1057549.74	1059031.76
6	96637.60	375827.63	388904.11	998514.62	1057498.87	1058984.25
5	96630.12	375388.15	388479.43	998511.25	1057448.06	1058936.80
4	96622.63	374949.63	388055.70	998507.89	1057397.29	1058889.41
3	96615.13	374512.07	387632.93	998504.52	1057346.58	1058842.07
2	96607.62	374075.46	387211.12	998501.14	1057295.92	1058794.78
1	96600.10	373639.80	386790.25	998497.76	1057245.31	1058747.55
0	96592.58	373205.08	386370.33	998494.38	1057194.75	1058700.38

15 ′	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Temologarith. pro Secante
0	25881.90	26794.92	103527.62	941299.62	942805.25	1001505.62
1	25910.03	26826.10	103535.69	941346.74	942855.75	1001509.01
2	25938.10	26857.28	103543.78	941393.81	942906.21	1001512.40
3	25966.19	26888.47	103551.87	941440.82	942956.61	1001515.80
4	25994.28	26919.67	103559.98	941487.78	943006.97	1001519.19
5	26022.37	26950.87	103568.09	941534.68	943057.27	1001522.60
6	26050.45	26982.07	103576.21	941581.52	943107.53	1001526.00
7	26078.53	27013.28	103584.35	941628.32	943157.73	1001529.41
8	26106.61	27044.49	103592.49	941675.06	943207.89	1001532.83
9	26134.69	27075.71	103600.65	941721.74	943257.99	1001536.25
10	26162.77	27106.93	103608.81	941768.37	943308.04	1001539.67
11	26190.85	27138.16	103616.99	941814.95	943358.05	1001543.10
12	26218.92	27169.40	103625.17	941861.48	943408.00	1001546.53
13	26246.99	27200.64	103633.37	941907.95	943457.91	1001549.96
14	26275.06	27231.88	103641.57	941954.36	943507.76	1001553.40
15	26303.12	27263.13	103649.79	942000.73	943557.57	1001556.84
16	26331.18	27294.38	103658.01	942047.04	943607.33	1001560.29
17	26359.24	27325.64	103666.25	942093.30	943657.04	1001563.74
18	26387.30	27356.90	103674.49	942139.50	943706.70	1001567.19
19	26415.36	27388.17	103682.75	942185.66	943756.31	1001570.65
20	26443.42	27419.44	103691.01	942231.76	943805.87	1001574.11
21	26471.47	27450.72	103699.29	942277.80	943855.38	1001577.58
22	26499.52	27482.01	103707.57	942323.80	943904.85	1001581.05
23	26527.57	27513.30	103715.87	942369.74	943954.26	1001584.52
24	26551.61	27544.50	103724.17	942415.63	944003.63	1001588.00
25	26483.65	27575.89	103732.49	942461.47	944052.95	1001591.48
26	26611.69	27607.19	103740.82	942507.26	944102.22	1001594.97
27	26639.73	27638.50	103749.15	942552.99	944151.45	1001598.46
28	26667.77	27669.81	103757.50	942598.67	944200.62	1001601.95
29	26695.81	27701.13	103765.85	942644.30	944249.75	1001605.45
30	26723.84	27732.45	103774.22	942689.88	944298.83	1001608.95
31	26751.87	27763.78	103782.60	942735.41	944347.86	1001612.45
32	26779.89	27795.12	103790.98	942780.89	944396.85	1001615.96
33	26807.92	27826.46	103799.38	942826.31	944445.79	1001619.48
34	26835.94	27857.80	103807.79	942871.69	944494 68	1001622.99
35	26863.96	27889.15	103816.21	942917.01	944543.52	1001626.52
36	26891.98	27920.50	103824.63	942962.28	944592.32	1001630.04
37	26920.00	27951.86	103833.07	943007.50	944641.07	1001633.57
38	26948.01	27983.22	103841.52	943052.67	944689.78	1001637.10
39	26976.02	28014.59	103849.98	943097.79	944738.43	1001640.64
40	27004.034	28045.97	103858.44	943142.86	944787.04	1001644.18
41	27032.04	28077.35	103866.92	943187.88	944835.61	1001647.73
42	27060.04	28108.73	103875.41	943232.85	944884.13	1001651.28
43	27088.05	28140.12	103883.91	943277.77	944932.60	1001654.83
44	27116.05	28171.52	103892.42	943322.64	944981.02	1001658.39
45	27144.04	28202.92	103900.94	943367.46	945029.40	1001661.95
46	27172.04	28234.32	103909.47	943412.23	945077.74	1001665.51
47	27200.03	28265.73	103918.00	943456.94	945126.02	1001669.08
48	27228.02	28297.15	103926.55	943501.61	945174.27	1001672.65
49	27256.01	28328.57	103935.11	943546.23	945222.46	1001676.23
50	27284.00	28359.99	103943.68	943590.80	945270.61	1001679.81
51	27311.98	28391.42	103952.26	943635.32	945318.72	1001683.39
52	27339.96	28422.86	103960.85	943679.80	945366.78	1001686.98
53	27367.94	28454.30	103969.45	943724.22	945414.79	1001690.58
54	27395.92	28485.75	103978.06	943768.59	945462.76	1001694.17
55	27423.90	28517.20	103986.69	943812.92	945510.69	1001697.77
56	27451.87	28548.66	103995.32	943857.19	945558.57	1001701.38
57	27479.84	28580.12	104003.96	943901.42	945606.41	1001704.99
58	27507.81	28611.59	104012.61	943945.60	945654.20	1001708.60
59	27535.78	28643.06	104021.27	943989.73	945701.94	1001712.22
60	27563.74	28674.54	104029.94	944033.81	945749.64	1001715.84

′	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
60	96592.58	373205.08	386370.33	998494.38	1057194.75	1058700.38
59	96585.05	372771.31	385951.35	998490.99	1057144.25	1058653.26
58	96577.51	372338.47	385533.32	998487.60	1057093.79	1058606.19
57	96569.96	371906.58	385116.22	998484.20	1057043.39	1058559.18
56	96562.40	371475.61	384700.05	998480.81	1056993.03	1058512.22
55	96554.83	371045.58	384284.82	998477.40	1056942.73	1058465.32
54	96547.26	370616.48	383870.51	998474.00	1056892.47	1058418.48
53	96539.68	370188.30	383457.13	998470.59	1056842.27	1058371.68
52	96532.09	369761.03	383044.67	998467.17	1056792.11	1058324.94
51	96524.49	369334.69	382633.13	998463.75	1056742.01	1058278.26
50	96516.88	368909.27	382222.51	998460.33	1056691.96	1058231.63
49	96509.27	368484.75	381812.80	998456.90	1056641.95	1058185.05
48	96501.65	368061.15	381403.99	998453.47	1056592.00	1058138.52
47	96494.02	367638.45	380996.10	998450.04	1056542.09	1058092.05
46	96486.38	367216.65	380589.11	998446.60	1056492.24	1058045.64
45	96478.73	366795.75	380183.01	998443.16	1056442.43	1057999.27
44	96471.07	366375.75	379777.82	998439.71	1056392.67	1057952.96
43	96463.41	365956.65	379373.52	998436.26	1056342.96	1057906.70
42	96455.74	365538.44	378970.11	998432.81	1056293.30	1057860.50
41	96448.06	365121.11	378567.60	998429.35	1056243.69	1057814.34
40	96440.37	364704.67	378165.96	998425.89	1056194.13	1057768.24
39	96432.67	364289.11	377765.22	998422.42	1056144.62	1057722.20
38	96424.97	363874.44	377365.35	998418.95	1056095.15	1057676.20
37	96417.26	363460.64	376966.36	998415.48	1056045.74	1057630.26
36	96409.54	363047.71	376568.24	998412.00	1055996.37	1057584.37
35	96401.81	362635.66	376171.00	998408.52	1055947.05	1057538.53
34	96394.07	362224.47	375774.62	998405.03	1055897.78	1057492.74
33	96386.33	361814.15	375379.11	998401.54	1055848.55	1057447.01
32	96378.58	361404.69	374984.47	998398.05	1055799.38	1057401.33
31	96370.82	360996.09	374590.68	998394.55	1055750.25	1057355.70
30	96363.05	360588.35	374197.75	998391.05	1055701.17	1057310.12
29	96355.27	360181.46	373805.68	998387.55	1055652.14	1057264.59
28	96347.48	359775.43	373414.46	998384.04	1055603.15	1057219.11
27	96339.69	359370.24	373024.09	998380.52	1055554.21	1057173.69
26	96331.89	358965.90	372634.57	998377.01	1055505.32	1057128.31
25	96324.08	358562.41	372245.89	998373.48	1055456.48	1057083.00
24	96316.26	358159.75	371858.05	998369.96	1055407.68	1057037.72
23	96308.43	357757.94	371471.05	998366.43	1055358.93	1056992.50
22	96300.59	357356.96	371084.89	998362.90	1055310.22	1056947.33
21	96292.75	356956.81	370099.56	998359.36	1055261.57	1056902.21
20	96284.90	356557.49	370315.06	998355.82	1055212.96	1056857.14
19	96277.04	356159.00	369931.39	998352.27	1055164.39	1056812.12
18	96269.17	355761.33	369548.54	998348.72	1055115.87	1056767.15
17	96261.30	355364.49	369166.52	998345.17	1055067.40	1056722.23
16	96253.42	354968.46	368785.32	998341.61	1055018.98	1056677.36
15	96245.53	354573.25	368404.93	998338.05	1054970.60	1056632.54
14	96237.63	354178.86	368025.36	998334.49	1054922.26	1056587.77
13	96229.72	353785.28	367646.60	998330.92	1054873.98	1056543.06
12	96221.80	353392.51	367268.65	998327.35	1054825.73	1056498.39
11	96213.87	353000.54	366891.51	998323.77	1054777.54	1056453.77
10	96205.94	352609.38	366515.18	998320.19	1054729.39	1056409.20
9	96198.00	352219.02	366139.64	998316.61	1054681.28	1056364.68
8	96190.05	351829.46	365764.91	998313.02	1054633.22	1056320.20
7	96182.09	351440.70	365390.97	998309.42	1054585.21	1056275.78
6	96174.13	351052.73	365017.83	998305.83	1054537.24	1056231.41
5	96166.16	350665.55	364645.48	998302.23	1054489.31	1056187.08
4	96158.18	350279.16	364273.92	996298.62	1054441.43	1056142.81
3	96150.19	349893.56	363903.15	998295.01	1054393.59	1056098.58
2	96142.19	349508.74	363533.16	998291.40	1054345.80	1056054.40
1	96134.18	349124.70	363163.95	998287.78	1054298.06	1056010.27
0	96126.17	348741.44	362795.53	998284.16	1054250.36	1055966.19

16 ′	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Temologarith. pro Secante
0	27563.74	28674.54	104029.94	944033.81	945749.64	1001715.84
1	27591.70	28706.02	104038.63	944077.84	945797.30	1001719.46
2	27619.65	28737.51	104047.32	944121.82	945844.91	1001723.09
3	27647.61	28769.00	104056.02	944165.76	945892.48	1001726.72
4	27675.56	28800.50	104064.73	944209.65	945940.01	1001730.36
5	27703.52	28832.01	104073.46	944253.49	945987.49	1001734.00
6	27731.47	28863.52	104082.19	944297.28	946034.92	1001737.62
7	27759.41	28895.03	104090.94	944341.03	946082.32	1001741.29
8	27787.36	28926.55	104099.69	944384.72	946129.67	1001744.94
9	27815.30	28958.08	104108.45	944428.37	946176.97	1001748.60
10	27843.24	28989.61	104117.23	94 471.97	946224.23	1001752.26
11	27871.18	29021.14	104126.01	944515.53	946271.45	1001755.92
12	27899.11	29052.68	104134.81	944559.04	946318.63	1001759.59
13	27927.04	29084.23	104143.62	944602.50	946365.76	1001763.26
14	27954.97	29115.78	104152.43	944645.91	946412.85	1001766.94
15	27982.90	29147.34	104161.26	944689.27	946459.90	1001770.62
16	28010.83	29178.90	104170.09	944732.59	946506.90	1001774.31
17	28038.75	29210.47	104178.94	944775.86	946553.86	1001777.99
18	28066.67	29242.05	104187.80	944819.09	946600.78	1001781.69
19	28094.59	29273.63	104196.67	944862.27	946647.65	1001785.38
20	28122.51	29305.21	104205.54	944905.40	946694.48	1001789.08
21	28150.42	29336.80	104214.43	944948.49	946741.27	1001792.79
22	28178.33	29368.39	104223.33	944991.53	946788.02	1001796.49
23	28206.24	29399.99	104232.24	945034.52	946834.73	1001800.21
24	28234.15	29431.60	104241.16	945077.47	946881.39	1001803.92
25	28262.05	29463.21	104250.09	945120.37	946928.01	1001807.64
26	28289.95	29494.83	104259.03	945163.22	946974.59	1001811.37
27	28317.85	29526.45	104267.98	945206.03	947021.12	1001815.10
28	28345.75	29558.08	104276.94	945248.79	947067.62	1001818.83
29	28373.64	29589.71	104285.91	945291.51	947114.07	1001822.56
30	28401.53	29621.35	104294.89	945334.18	947160.48	1001826.30
31	28429.42	29652.99	104303.88	945376.81	947206.85	1001830.05
32	28457.31	29684.64	104312.89	945419.39	947253.18	1001833.80
33	28485.20	29716.30	104321.90	945461.92	947299.47	1001837.55
34	28513.08	29747.96	104330.92	945504.41	947345.72	1001841.30
35	28540.96	29779.62	104339.95	945546.86	947391.92	1001845.06
36	28568.84	29811.29	104349.00	945589.26	947438.08	1001848.83
37	28596.71	29842.97	104358.05	945631.61	947484.21	1001852.60
38	28624.58	29874.65	104367.12	945673.92	947530.29	1001856.37
39	28652.45	29906.34	104376.19	945716.18	947576.33	1001860.14
40	28680.32	29938.03	104385.28	945758.40	947622.33	1001863.92
41	28708.19	29969.73	104394.37	945800.58	947668.29	1001867.71
42	28736.05	30001.44	104403.48	945842.71	947714.21	1001871.50
43	28763.91	30033.15	104412.59	945884.80	947760.09	1001875.29
44	28791.77	30064.86	104421.72	945926.84	947805.92	1001879.09
45	28819.63	30096.58	104430.86	945968.84	947851.72	1001882.89
46	28847.48	30128.31	104440.01	946010.79	947897.48	1001886.69
47	28875.33	30160.04	104449.17	946052.70	947943.19	1001890.50
48	28903.18	30191.78	104458.33	946094.56	947988.87	1001894.31
49	28931.03	30223.52	104467.51	946136.38	948034.51	1001898.13
50	28958.87	30255.27	104476.70	946178.16	948080.11	1001901.95
51	28986.71	30287.03	104485.90	946219.89	948125.66	1001905.77
52	29014.55	30318.79	104495.11	946261.58	948171.18	1001909.60
53	29042.39	30350.55	104504.33	946303.23	948216.66	1001913.43
54	29070.22	30382.32	104513.57	946344.83	948262.10	1001917.27
55	29098.05	30414.10	104522.81	946386.39	948307.50	1001921.11
56	29125.88	30445.88	104532.06	946427.90	948352.86	1001924.95
57	29153.71	30477.67	104541.32	946469.38	948398.18	1001928.80
58	29181.53	30509.46	104550.60	946510.81	948443.46	1001932.65
59	29209.35	30541.26	104559.88	946552.19	948488.70	1001936.51
60	29237.17	30573.07	104569.18	946593.53	948533.90	1001940.37

′	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tagente	Tomologarith. pro Secante
60	96126.47	348741.44	362795.53	998284.16	1054250.36	1055966.19
59	96118.45	348358.96	362427.88	998280.54	1054202.70	1055922.16
58	96110.12	347977.26	362061.01	998276.91	1054155.09	1055878.18
57	96102.08	347596.32	361694.90	998273.28	1054107.52	1055834.24
56	96094.03	347216.16	361329.57	998269.64	1054059.99	1055790.35
55	96085.98	346836.76	360965.01	998266.00	1054012.51	1055746.51
54	96077.92	346458.13	360601.21	998262.36	1053965.08	1055702.72
53	96069.85	346080.26	360238.18	998258.71	1053917.68	1055658.97
52	96061.77	345703.15	359875.90	998255.06	1053870.33	1055615.28
51	96053.68	345326.79	359514.39	998251.40	1053823.03	1055571.63
50	96045.58	344951.20	359153.63	998247.74	1053775.77	1055528.03
49	96037.48	344576.35	358793.62	998244.08	1053728.55	1055484.47
48	96029.37	344202.26	358434.37	998240.41	1053681.37	1055440.96
47	96021.25	343828.91	358075.86	998236.74	1053634.24	1055397.50
46	96013.12	343456.31	357718.10	998233.06	1053587.15	1055354.09
45	96004.98	343084.46	357361.08	998229.38	1053540.10	1055310.73
44	95996.84	342713.34	357004.81	998225.69	1053493.10	1055267.41
43	95988.69	342342.97	356649.28	998222.01	1053446.14	1055224.14
42	95980.53	341973.33	356294.48	998218.31	1053399.22	1055180.91
41	95972.36	341604.43	355940.42	998214.62	1053352.35	1055137.73
40	95964.18	341236.26	355587.10	998210.92	1053305.52	1055094.60
39	95956.00	340868.82	355234.50	998207.21	1053258.73	1055051.51
38	95947.81	340502.10	354882.63	998203.51	1053211.98	1055008.47
37	95939.61	340136.12	354531.49	998199.79	1053165.27	1054965.48
36	95931.40	339770.85	354181.07	998196.08	1053118.61	1054922.53
35	95923.18	339406.31	353831.38	998192.36	1053071.99	1054879.63
34	95914.95	339042.49	353482.40	998188.63	1053025.41	1054836.78
33	95906.72	338679.38	353134.14	998184.90	1052978.88	1054793.97
32	95898.48	338316.99	352786.60	998181.17	1052932.38	1054751.21
31	95890.23	337955.31	352439.77	998177.44	1052885.93	1054708.49
30	95881.97	337594.34	352093.65	998173.70	1052839.52	1054665.82
29	95873.70	337234.08	351748.24	998169.95	1052793.15	1054623.19
28	95865.43	336874.53	351403.54	998166.20	1052746.82	1054580.61
27	95857.15	336515.68	351059.54	998162.45	1052700.53	1054538.08
26	95848.86	336157.53	350716.25	998158.70	1042654.28	1054495.59
25	95840.56	335800.08	350373.65	998154.94	1052608.08	1054453.14
24	95832.25	335443.33	350031.75	998151.17	1052561.92	1054410.74
23	95823.94	335087.28	349690.55	998147.40	1052515.79	1054368.39
22	95815.62	334731.91	349350.04	998143.63	1052469.71	1054326.08
21	95807.29	334377.24	349010.23	998139.86	1052423.67	1054283.82
20	95798.95	334023.26	348671.10	998136.08	1052377.67	1054241.60
19	95790.60	333669.97	348332.67	998132.29	1052331.71	1054199.42
18	95782.25	333317.36	347994.92	998128.50	1052285.79	1054157.29
17	95773.89	332965.43	347657.85	998124.71	1052239.91	1054115.20
16	95765.52	332614.19	347321.46	998120.91	1052194.08	1054073.16
15	95757.14	332263.62	346985.76	998117.11	1052148.28	1054031.16
14	95748.75	331913.73	346650.73	998113.31	1052102.52	1053989.21
13	95740.35	331564.52	346316.37	998109.50	1052056.81	1053947.30
12	95731.95	331215.98	345982.69	998105.69	1052011.13	1053905.44
11	95723.54	330868.11	345649.69	998101.87	1051965.49	1053863.62
10	95715.12	330520.91	345317.35	998098.05	1051919.89	1053821.84
9	95706.69	330174.38	344985.68	998094.23	1051874.34	1053780.11
8	95698.25	329828.51	344654.67	998090.40	1051828.82	1053738.42
7	95689.81	329483.30	344324.33	998086.57	1051783.34	1053696.77
6	95681.36	329138.76	343994.65	998082.73	1051737.90	1053655.17
5	95672.90	328794.87	343665.63	998078.89	1051692.50	1053613.61
4	95664.43	328451.64	343337.27	998075.05	1051647.14	1053572.10
3	95655.95	328109.07	343009.56	998071.20	1051601.82	1053530.62
2	95647.47	327767.15	342682.51	998067.35	1051556.54	1053489.19
1	95638.98	327425.88	342356.11	998063.49	1051511.30	1053447.81
0	95630.48	327085.26	342030.36	998059.63	1051466.10	1053406.47

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tagente	Tomologarith. pro Secante
0	29237. 17	30573. 07	104569. 18	946593. 53	948533. 90	1001940. 37
1	29264. 99	30604. 88	104578. 48	946634. 83	948579. 07	1001944. 23
2	29292. 80	30636. 69	104587. 80	946676. 09	948624. 19	1001948. 10
3	29320. 61	30668. 51	104597. 12	946717. 30	948669. 28	1001951. 97
4	29348. 42	30700. 34	104606. 46	946758. 48	948714. 33	1001955. 85
5	29376. 23	30732. 18	104615. 81	946799. 60	948759. 33	1001959. 73
6	29404. 03	30764. 02	104625. 16	946840. 69	948804. 30	1001963. 61
7	29431. 83	30795. 86	104634. 53	946881. 73	948849. 24	1001967. 50
8	29459. 63	30827. 71	104643. 91	946922. 73	948894. 13	1001971. 40
9	29487. 43	30859. 57	104653. 30	946963. 69	948938. 98	1001975. 29
10	29515. 22	30891. 43	104662. 70	947004. 61	948983. 80	1001979. 19
11	29543. 01	30923. 30	104672. 11	947045. 48	949028. 58	1001983. 10
12	29570. 80	20955. 17	104681. 53	947086. 31	949073. 32	1001987. 01
13	29598. 59	30987. 05	104690. 96	947127. 10	949118. 02	1001990. 92
14	29626. 38	31018. 93	104700. 40	947167. 85	949162. 69	1001994. 84
15	29654. 16	31050. 82	104709. 86	947208. 56	949207. 31	1001998. 76
16	29681. 94	31082. 72	104719. 32	947249. 22	949251. 90	1002002. 68
17	29709. 71	31114. 62	104728. 79	947289. 85	949296. 46	1002006. 61
18	29737. 49	31146. 53	104738. 28	947330. 43	949340. 97	1002010. 54
19	29765. 26	31178. 44	104747. 77	947370. 97	949385. 45	1002014. 48
20	29793. 03	31210. 36	104757. 28	947411. 46	949429. 88	1002018. 42
21	29820. 79	31242. 29	104766. 79	947451. 92	949474. 29	1002022. 36
22	29848. 56	31274. 22	104776. 32	947492. 34	949518. 65	1002026. 31
23	29876. 32	31306. 16	104785. 86	947532. 71	949562. 98	1002030. 27
24	29904. 08	31338. 10	104795. 40	947573. 04	949607. 27	1002034. 22
25	29931. 84	31370. 05	104804. 96	947613. 34	949651. 52	1002038. 18
26	29959. 59	31402. 00	104814. 53	947653. 59	949695. 74	1002042. 15
27	29987. 34	31433. 96	104824. 11	947693. 80	949739. 91	1002046. 12
28	30015. 09	31465. 93	104833. 70	947733. 96	949784. 06	1002050. 09
29	30042. 84	31497. 90	104843. 30	947774. 09	949828. 16	1002054. 07
30	30070. 58	31529. 88	104852. 91	947814. 18	949872. 23	1002058. 05
31	30098. 32	31561. 86	104862. 53	947854. 23	949916. 26	1002062. 04
32	30126. 06	31593. 85	104872. 17	947894. 23	949960. 26	1002066. 02
33	30153. 80	31625. 85	104881. 81	947934. 20	950004. 22	1002070. 02
34	30181. 53	31657. 85	104891. 46	947974. 12	950048. 14	1002074. 02
35	30209. 26	31689. 86	104901. 13	948014. 01	950092. 03	1002078. 02
36	30236. 99	31721. 87	104910. 80	948053. 85	950135. 88	1002082. 02
37	30264. 71	31753. 89	104920. 49	948093. 66	950179. 69	1002086. 03
38	30292. 44	31785. 91	104930. 19	948133. 42	950223. 47	1002090. 04
39	30320. 16	31817. 94	104939. 89	948173. 15	950267. 21	1002094. 06
40	30347. 88	31849. 98	104949. 61	948212. 83	950310. 92	1002098. 08
41	30375. 59	31882. 02	104959. 34	948252. 48	950354. 59	1002102. 11
42	30403. 31	31914. 07	104969. 08	948292. 08	950398. 22	1002106. 14
43	30431. 02	31946. 13	104978. 83	948331. 65	950441. 82	1002110. 17
44	30458. 72	31978. 19	104988. 59	948371. 17	950485. 38	1002114. 21
45	30486. 43	32010. 25	104998. 36	948410. 66	950528. 91	1002118. 25
46	30514. 13	32042. 32	105008. 15	948450. 10	950572. 40	1002122. 30
47	30541. 83	32074. 40	105017. 94	948489. 51	950615. 86	1002126. 35
48	30569. 53	32106. 49	105027. 74	948528. 88	950659. 28	1002130. 40
49	30597. 23	32138. 58	105037. 56	948568. 20	950702. 67	1002134. 46
50	30624. 92	32170. 67	105047. 38	948607. 49	950746. 02	1002138. 52
51	30652. 61	32202. 77	105057. 22	948646. 74	950789. 33	1002142. 59
52	30689. 29	32234. 88	105067. 06	948685. 95	950832. 61	1002146. 66
53	30707. 98	32267. 00	105076. 92	948725. 12	950875. 86	1002150. 73
54	30735. 66	32299. 12	105086. 79	948764. 26	950919. 07	1002154. 81
55	30763. 34	32331. 25	105096. 67	948803. 35	950962. 24	1002158. 89
56	30791. 02	32363. 38	105106. 56	948842. 40	951005. 39	1002162. 98
57	30818. 69	32395. 52	105116. 46	948881. 42	951048. 49	1002167. 07
58	30846. 36	32427. 66	105126. 37	948920. 40	951091. 56	1002171. 17
59	30874. 03	32459. 81	105136. 29	948959. 34	951134. 60	1002175. 26
60	30901. 70	32491. 97	105146. 22	948998. 24	951177. 60	1002179. 37

′	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tăgente	Tomologarith. pro Secante
60	95630.48	327085.26	342030.36	998059.63	1051466.10	1053406.47
59	95621.97	326745.29	341705.26	998055.77	1051420.93	1053365.17
58	95613.45	326405.96	341380.80	998051.90	1051375.81	1053323.91
57	95604.92	326067.28	341056.99	998048 03	1051330.72	1053282.70
56	95596.39	325729.24	340733.82	998044.15	1051285.67	1053241.52
55	95587.85	325391.84	340411.30	998040.27	1051240.67	1053200.40
54	95579.30	325055.08	340089.41	998036.39	1051195.70	1053159.31
53	95570.74	324718.95	339768.16	998032.50	1051150.76	1053118.27
52	95562.17	324383.46	339447.54	998028.60	1051105.87	1053077.27
51	95553.60	324048.60	339127.55	998024.71	1051061.02	1053036.31
50	95545.02	323714.38	338808.20	998020.81	1051016.20	1052995.39
49	95536.43	323380.78	338489.48	998016.90	1050971.42	1052954.52
48	95527.83	323047.80	338171.38	998012.99	1050926.68	1052913.69
47	95519.22	322715.46	337853.91	998009.08	1050881.98	1052872.90
46	95510.61	322383.73	337537.07	998005.16	1050837.31	1052832.15
45	95501.99	322052.63	337220.84	998001.24	1050792.69	1052791.44
44	95493.36	321722.15	336905.24	997997.32	1050748.10	1052750.78
43	95484.72	321392.28	336590.26	997993.39	1050703.54	1052710.15
42	95476.07	321063.04	336275.89	997989.46	1050659.03	1052669.57
41	95467.42	320734.40	335962.14	997985.52	1050614.55	1052629.03
40	95458.76	320406.38	335649.00	997981.58	1050570.12	1052588.54
39	95450.09	320078.97	335336.47	997977.64	1050525.71	1052546.08
38	95441.41	319752.17	335024.55	997973.69	1050481.35	1052507.66
37	95432.72	319425.98	334713.24	997969.73	1050437.02	1052467.29
36	95424.03	319100.39	334402.54	997965.78	1050392.73	1052426.96
35	95415.33	318775.40	334092.44	997961.82	1050348.48	1052386.66
34	95406.62	318451.02	333782.94	997957.85	1050304.26	1052346.41
33	95397.90	318127.24	333474.05	997953.88	1050260.09	1052306.20
32	95389.17	317804.06	333165.75	997949.91	1050215.94	1052266.04
31	95380.43	317481.47	332858.05	997945.93	1050171.84	1052225.91
30	95371.69	317159.48	332550.95	997941.95	1050127.77	1052185.81
29	95362.94	316838.08	332244.44	997937.96	1050083.74	1052145.77
28	95354.18	316517.28	331938.53	997933.98	1050039.74	1052105.77
27	95345.41	316197.06	331633.20	997929.98	1049995.78	1052065.80
26	95336.64	315877.44	331328.47	997925.99	1049951.86	1052025.88
25	95327.86	315558.40	331024.32	997921.98	1049907.97	1051985.99
24	95319.07	315239.94	330720.76	997917.98	1049864.12	1051946.15
23	95310.27	314922.07	330417.78	997913.97	1049820.31	1051906.34
22	95301.46	314604.78	330115.39	997909.96	1049776.53	1051866.58
21	95292.64	314288.07	329813.57	997905.94	1049732.79	1051826.85
20	95283.82	313971.94	329512.34	997901.92	1049689.08	1051787.17
19	95274.99	313656.39	329211.68	997897.89	1049645.41	1051747.52
18	95266.15	313341.41	328911.60	997893.86	1049601.78	1051707.92
17	95257.30	313027.01	328612.09	997889.83	1049558.18	1051668.35
16	95248.44	312713.17	328313.16	997885.79	1049514.62	1051628.83
15	95239.58	312399.91	328014.79	997881.75	1049471.09	1051589.34
14	95230.71	312087.22	327717.00	997877.70	1049427.60	1051549.90
13	95221.83	311775.09	327419.77	997873.65	1049384.14	1051510.49
12	95212.94	311463.53	327123.11	997869.60	1049340.72	1051471.12
11	95204.04	311152.54	326827.02	997865.54	1049297.33	1051431.80
10	95195.14	310842.10	326531.49	997861.48	1049253.98	1051392.51
9	95186.23	310532.23	326236.52	997857.41	1049210.67	1051353.26
8	95177.31	310222.91	325942.11	997853.34	1049167.39	1051314.05
7	95168.38	309914.16	325648.25	997849.27	1049124.14	1051274.88
6	95159.44	309605.96	325354.96	997845.19	1049080.93	1051235.74
5	95150.49	309298.31	325062.22	997841.11	1049037.76	1051196.65
4	95141.54	308991.22	324770.03	997837.02	1048994.61	1051157.60
3	95132.58	308684.68	324478.40	997832.93	1048951.51	1051118.58
2	95123.61	308378.69	324187.32	997828.83	1048908.44	1051079.60
1	95114.63	308073.25	323896.78	997824.74	1048865.40	1051040.66
0	95105.65	307768.35	323606.80	997820.63	1048822.40	1051001.76

′	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0	30901.70	32491.97	105146.22	948998.24	951177.60	1002179.37
1	30929.36	32524.13	105156.17	949037.10	951220.57	1002183.47
2	30957.02	32556.30	105166.12	949075.92	951263.51	1002187.59
3	30984.68	32588.48	105176.08	949114.71	951306.41	1002191.70
4	31012.34	32620.66	105186.06	949153.45	951349.27	1002195.82
5	31039.99	32652.85	105196.05	949192.16	951392.10	1002199.94
6	31067.64	32685.04	105206.04	949230.83	951434.90	1002204.07
7	31095.29	32717.24	105216.05	949269.46	951477.66	1002208.20
8	31122.94	32749.44	105226.07	949308.06	951520.39	1002212.34
9	31150.58	32781.65	105236.10	949346.61	951563.09	1002216.47
10	31178.22	32813.87	105246.14	949385.13	951605.75	1002220.62
11	31205.86	32846.10	105256.19	949423.61	951648.38	1002224.77
12	31233.49	32878.33	105266.25	949462.05	951690.97	1002228.91
13	31261.12	32910.56	105276.33	949500.46	951733.53	1002233.07
14	31288.75	32942.80	105286.41	949538.83	951776.06	1002237.23
15	31316.38	32975.05	105296.51	949577.16	951818.55	1002241.40
16	31344.00	33007.31	105306.61	949615.45	951861.01	1002245.56
17	31371.63	33039.57	105316.73	949653.70	951903.44	1002249.74
18	31399.25	33071.84	105326.86	949691.92	951945.83	1002253.91
19	31426.86	33104.11	105336.99	949730.10	951988.19	1002258.09
20	31454.48	33136.39	105347.14	949768.24	952030.52	1002262.28
21	31482.09	33168.68	105357.30	949806.35	952072.82	1002266.46
22	31509.69	33200.97	105367.47	949844.42	952115.08	1002270.66
23	31537.30	33233.27	105377.65	949882.45	952157.30	1002274.85
24	31564.90	33265.57	105387.85	949920.45	952199.50	1002279.05
25	31592.50	33297.88	105398.05	949958.40	952241.66	1002283.26
26	31620.10	33330.20	105408.26	949996.33	952283.79	1002287.47
27	31647.70	33362.52	105418.49	950034.21	952325.89	1002291.68
28	31675.29	33394.85	105428.73	950072.06	952367.95	1002295.90
29	31702.88	33427.19	105438.97	950109.87	952409.99	1002300.12
30	31730.47	33459.53	105449.23	950147.64	952451.99	1002304.34
31	31758.05	33491.88	105459.50	950185.38	952493.95	1002308.57
32	31785.63	33524.24	105469.78	950223.08	952535.89	1002312.80
33	31813.21	33556.60	105480.07	950260.75	952577.79	1002317.04
34	31840.79	33588.97	105490.37	950298.38	952619.66	1002321.28
35	31868.36	33621.34	105500.68	950335.97	952661.50	1002325.53
36	31895.93	33653.72	105511.01	950373.53	952703.31	1002329.78
37	31923.50	33686.11	105521.34	950411.05	952745.08	1002334.03
38	31951.06	33718.50	105531.69	950448.53	952786.82	1002338.29
39	31978.63	33750.90	105542.04	950485.98	952828.53	1002342.55
40	32006.19	33783.30	105552.41	950523.39	952870.21	1002346.82
41	32033.74	33815.71	105562.79	950560.77	952911.86	1002351.09
42	32061.30	33848.13	105573.18	950598.11	952953.47	1002355.36
43	32088.85	33880.56	105583.58	950635.42	952995.05	1002359.64
44	32116.40	33912.99	105593.99	950672.69	953036.61	1002363.92
45	32143.95	33945.43	105604.41	950709.92	953078.13	1002368.21
46	32171.49	33977.87	105614.85	950747.12	953119.61	1002372.50
47	32199.03	34010.32	105625.29	950784.28	953161.07	1002376.79
48	32226.57	34042.78	105635.75	950821.41	953202.50	1002381.09
49	32254.10	34075.24	105646.21	950858.50	953243.89	1002385.39
50	32281.64	34107.71	105656.69	950895.56	953285.26	1002389.70
51	32309.17	34140.19	105667.18	950932.58	953326.59	1002394.01
52	32336.70	34172.67	105677.68	950969.56	953367.89	1002398.33
53	32364.22	34205.16	105688.19	951006.51	953409.16	1002402.64
54	32391.74	34237.65	105698.71	951043.43	953450.40	1002406.97
55	32419.26	34270.15	105709.24	951080.31	953491.61	1002411.30
56	32446.78	34302.66	105719.78	951117.16	953532.78	1002415.63
57	32474.29	34335.18	105730.34	951153.97	953573.93	1002419.96
58	32501.80	34367.70	105740.90	951190.74	953615.05	1002424.30
59	32529.31	34400.23	105751.48	951227.49	953656.13	1002428.65
60	32556.82	34432.76	105762.07	951264.19	953697.19	1002432.99

′	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tagente	Tomelogarith. pro Secante
60	95105.65	307768.35	323606.80	997820.63	1048822.49	1051001.76
59	95096.66	307464.00	323317.36	997816.53	1048779.43	1050962.90
58	95087.66	307160.20	323028.46	997812.41	1048736.49	1050924.08
57	95078.67	306856.93	322740.11	997808.30	1048693.59	1050885.29
56	95069.63	306554.21	322452.30	997804.18	1048650.73	1050846.55
55	95060.60	306252.03	322165.03	997800.06	1048607.90	1050807.84
54	95051.57	305950.38	321878.30	997795.93	1048565.10	1050769.17
53	95042.53	305649.28	321592.10	997791.80	1048522.34	1050730.54
52	95033.48	305348.70	321306.44	997787.66	1048479.61	1050691.94
51	95024.42	305048.66	321021.32	997783.53	1048436.91	1050653.39
50	95015.36	304749.15	320736.73	997779.38	1048394.25	1050614.87
49	95006.29	304450.18	320452.66	997775.23	1048351.62	1050576.39
48	94497.21	304151.73	320169.13	997771.08	1048309.03	1050537.95
47	94988.12	303853.81	319886.13	997766.93	1048266.47	1050499.54
46	94979.02	303556.41	319603.65	997762 77	1048223.94	1050461.17
45	94969.91	303259.54	319321.70	997758.60	1048181.45	1050422.84
44	94960.80	302963.20	319040.28	997754.44	1048138.99	1050384.55
43	94951.68	302667.37	318759.37	997750.26	1048096.56	1050346.30
42	94942.55	302372.07	318478.99	997746.09	1048054.17	1050308.08
41	94933.41	302077.28	318199.13	997741.91	1048011.81	1050269.90
40	94924.26	301783.01	317919.78	997737.72	1047969.48	1050231.76
39	94915.11	301489.26	317640.95	997733.54	1047927.18	1050193.65
38	94905.95	301196.02	317362.64	997729.34	1047884.92	1050155.58
37	94896.78	300903.30	317084.84	997725.15	1047842.70	1050117.55
36	94887.60	300611.09	316807.56	997720.95	1047800.50	1050079.55
35	94878.41	300319.39	316530.78	997716.74	1047758.34	1050041.60
34	94869.22	300028.20	316254.52	997712.53	1047716.21	1050003.67
33	94860.02	299737.51	315978.76	997708.32	1047674.11	1049965.79
32	94850.81	299447.34	315703.51	997704.10	1047632.05	1049927.94
31	94841.59	299157.66	315428.77	997699.88	1047590.01	1049890.13
30	94832.36	298868.50	315154.53	997695.66	1047548.01	1049852.36
29	94823.13	298579.83	314880.79	997691.43	1047506.05	1049814.62
28	94813.89	298291.66	314607.56	997687.20	1047464.11	1049776.92
27	94804.64	298004.00	314334.83	997682.96	1047422.21	1049739.25
26	94795.38	297716.83	314062.59	997678.72	1047380 34	1049701.62
25	94786.11	297430.16	313790.86	997674.47	1047338.50	1049664.03
24	94776.84	297143.99	313519.62	997670.22	1047296.69	1049626.47
23	94767.56	296858.31	313248.87	997665.97	1047254.92	1049588.95
22	94758.27	296573.12	372978.62	997661.71	1047213.18	1049551.47
21	94748.97	296288.42	312708.86	997657.45	1047171.47	1049514.02
20	94739.66	296004.22	312439.59	997653.18	1047129.79	1049476.61
19	94730.35	295720.50	312170.81	997648.91	1047088.14	1049439.23
18	94721.03	295437.27	311902.52	997644.64	1047046.53	1049401.89
17	94711.70	295154.53	311634.72	997640.36	1047004.95	1049364.58
16	94702.36	294872.27	311367.40	997636.08	1046963.39	1049327.31
15	94693.01	294590.50	311100.57	997631.79	1046921.87	1049290.08
14	94683.66	294309.21	310834.22	997627.50	1046880.39	1049252.88
13	94674.30	294028.40	310568.35	997623.21	1046838.93	1049215.72
12	94664.93	293748.07	310302.96	997618.91	1046797.50	1049178.59
11	94655.55	293468.22	310038.05	997614.61	1046756.11	1049141.50
10	94646.16	293188.85	309773.63	997610.30	1046714.74	1049104.44
9	94636.76	292909.95	309509.67	997605.99	1046673.41	1049067.42
8	94627.36	292631.52	309246.20	997601.67	1046632.11	1049030.44
7	94617.95	292353.58	308983.19	997597.36	1046590.84	1048993.49
6	94608.53	292076.10	308720.66	997593.03	1046549.60	1048956.57
5	94599.10	291799.09	308458.60	997588.70	1046508.39	1048919.69
4	94589.67	291522.56	308197.02	997584.37	1046467.22	1048882.84
3	94580.23	291246.49	307935.90	997580.04	1046426.07	1048846.03
2	94570.78	290970.89	307675.25	997575.70	1046384.95	1048809.26
1	94561.32	290695.76	307415.07	997571.35	1046343.87	1048772.51
0	94551.85	290421.09	307155.35	997567.01	1046302.81	1048735.81

19	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0	32556.82	34432.76	105762.07	951264.19	953697.19	1002432.99
1	32584.32	34465.30	105772.67	951300.86	953738.21	1002437.35
2	32611.82	34497.85	105783.28	951337.50	953779.20	1002441.70
3	32639.31	34530.40	105793.90	951374.10	953820.17	1002446.06
4	32666.81	34562.96	105804.53	951410.67	953861.10	1002450.43
5	32694.30	34595.53	105815.17	951447.21	953902.00	1002454.79
6	32721.79	34628.10	105825.83	951483.71	953942.87	1002459.17
7	32749.28	34660.68	105836.49	951520 17	953983.71	1002463.54
8	32776.76	34693.27	105847.17	951556.60	954024.53	1002467.92
9	32804.24	34725.86	105857.86	951593.00	954065.31	1002472.31
10	32831.72	34758.46	105868.55	951629.36	954106.06	1002476.70
11	32859.19	34791.07	105879.26	951665.69	954146.78	1002481.09
12	32886.66	34823.68	105889.99	951701.98	954187.47	1002485.49
13	32914.13	34856.30	105900.72	951738.24	954228.13	1002489.89
14	32941.60	34888.93	105911.46	951774.47	954268.77	1002494.30
15	32969.06	34921.56	105922.21	951810.66	954309.37	1002498.71
16	32996.52	34954.20	105932.98	951846.82	954349.94	1002503.12
17	33023.98	34986.85	105943.76	951882.95	954390.48	1002507.54
18	33051.44	35019.50	105954.54	951919.04	954431.00	1002511.96
19	33078.89	35052.16	105965.34	951955.10	954471.48	1002516.39
20	33106.34	35084.83	105976.15	951991.12	954511.93	1002520.82
21	33133.79	35117.50	105986.97	952027.11	954552.36	1002525.25
22	33161.23	35150.18	105997.81	952063.07	954592.76	1002529.69
23	33188.67	35182.87	106008.65	952098.99	954633.12	1002534.13
24	33216.11	35215.56	106019.51	952134.88	954673.46	1002538.58
25	33243.55	35248.26	106030 37	952170.74	954713.77	1002543.03
26	33270.98	35280.97	106041.25	952206.56	954754.05	1002547.48
27	33298.41	35313.68	106052.14	952242.35	954794.30	1002551.94
28	33325.84	35346.40	106063.04	952278.11	954834.52	1002556.41
29	33353.27	35379.13	106073.95	952313.83	954874.71	1002560.87
30	33380.69	35411.86	106084.87	952349.53	954914.87	1002565.34
31	33408.10	35444.60	106095.80	952385.18	954955.00	1002569.82
32	33435.52	35477.35	106106.75	952420.81	954995.11	1002574.30
33	33462.93	35510.10	106117.70	952456.40	955035.19	1002578.78
34	33490.34	35542.86	106128.67	952491.96	955075.23	1002583.27
35	33517.75	35575.63	106139.65	952527.49	955115.25	1002587.76
36	33545.16	35608.40	106150.64	952562.98	955155.24	1002592.26
37	33572.56	35641.18	106161.64	952598.44	955195.21	1002596.76
38	33599.96	35673.97	106172.65	952633.87	955235.14	1002601.27
39	33627.35	35706.76	106183.67	952669.27	955275.04	1002605.78
40	33654.75	35739.56	106194.71	952704.63	955314.92	1002610.29
41	33682.14	35772.37	106205.75	952739.97	955354.77	1002614.81
42	33709.53	35805.18	106216.81	952775.26	955394.59	1002619.33
43	33736.91	35838.00	106227.88	952810.53	955434.38	1002623.85
44	33764.29	35870.83	106238.96	952845.77	955474.15	1002628.38
45	33791.67	35903.67	106250.05	952880.97	955513.88	1002632.91
46	33819.05	35936.51	106261.15	952916.14	955553.59	1002637.45
47	33846.42	35969.36	106272.27	952951.28	955593.27	1002641.99
48	33873.79	36002.22	106283.39	952986.38	955632.92	1002646.54
49	33901.16	36035.08	106294.53	953021.46	955672.55	1002651.09
50	33928.53	36067.95	106305.68	953056.50	955712.14	1002655.65
51	33955.89	36100.83	106316.84	953091.51	955751.71	1002660.20
52	33983.25	36133.71	106328.01	953126.49	955791.25	1002664.77
53	34010.60	36166.60	106339.19	953161.43	955830.77	1002669.33
54	34037.95	36199.50	106350.38	953196.35	955870.25	1002673.90
55	34065.30	36232.40	106361.58	953231.23	955909.71	1002678.48
56	34092.65	36265.31	106372.80	953266.08	955949.14	1002683.06
57	34120.00	36298.23	106384.03	953300.90	955988.54	1002687.64
58	34147.34	36331.15	106395.27	953335.69	956027.92	1002692.23
59	34174.68	36364.08	106406.52	953370.44	956067.27	1002696.82
60	34202.02	36397.02	106417.78	953405.17	956106.59	1002701.42

′	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tagente	Tomologarith. pro Secante
60	94551.85	290421.09	307155.35	997567.01	1046302.81	1048735.81
59	94542.38	290146.88	306896.10	997562.65	1046261.79	1048699.14
58	94532.90	289873.14	306637.31	997558.30	1046220.80	1048662.50
57	94523.41	289599.86	306378.98	997553.94	1046179.83	1048625.90
56	94513.91	289327.04	306121.11	997549.57	1046138.90	1048589.33
55	94504.40	289054.67	305863.70	997545.21	1046098.00	1048552.79
54	94494.89	288782.77	305606.75	997540.83	1046057.13	1048516.29
53	94485.37	288511.32	305350.26	997536.46	1046016.29	1048479.83
52	94475.84	288240.33	305094.23	997532.08	1045975.47	1048443.40
51	94466.30	287969.79	304838.64	997527.69	1045934.69	1048407.00
50	94456.75	287699.70	304583.52	997523.30	1045893.94	1048370.64
49	94447.20	287430.07	304328.84	997518.91	1045853.22	1048334.31
48	94437.64	287160.88	304074.62	997514.51	1045812.53	1048298.02
47	94428.07	286892.15	303820.84	997510.11	1045771.87	1048261.76
46	94418.49	286623.86	303567.52	997505.70	1045731.23	1048225.53
45	94408.90	286356.02	303314.64	997501.29	1045690.63	1048189.34
44	94399.31	286088.63	303062.21	997496.88	1045650.06	1048153.18
43	94389.71	285821.68	302810.23	997492.46	1045609.52	1048117.05
42	94380.10	285555.17	302558.68	997488.04	1045569.00	1048080.96
41	94370.48	285289.11	302307.99	997483.61	1045528.52	1048044.90
40	94360.85	285023.49	302056.93	997479.18	1045488.07	1048008.88
39	94351.21	284758.31	301806.72	997474.75	1045447.64	1047972.89
38	94341.57	284493.56	301556.94	997470.31	1045407.24	1047936.93
37	94331.92	284229.26	301307.60	997465.87	1045366.88	1047901.01
36	94322.26	283965.39	301058.70	997461.42	1045326.54	1047865.12
35	94312.60	283701.96	300810.24	997456.97	1045286.23	1047829.26
34	94302.93	283438.96	300562.21	997452.52	1045245.95	1047793.44
33	94293.25	283176.39	300314.62	997448.06	1045205.70	1047757.65
32	95283.56	282914.26	300067.46	997443.59	1045165.48	1047721.89
31	94273.86	282652.56	299820.73	997439.13	1045125.29	1047686.17
30	94264.15	282391.29	299574.43	997434.66	1045085.13	1047650.47
29	94254.43	282130.45	299328.56	997430.18	1045045.00	1047614.82
28	94244.71	281870.03	299083.12	997425.70	1045004.89	1047579.19
27	94234.98	281610.04	298838.11	997421.22	1044964.81	1047543.60
26	94225.24	281350.48	298593.52	997416.73	1044924.77	1047508.04
25	94215.50	281091.34	298349.36	997412.24	1044884.75	1047472.51
24	94205.75	280832.63	298105.63	997407.74	1044844.76	1047437.02
23	94195.99	280574.33	297862.31	997403.24	1044804.79	1047401.56
22	94186.22	280316.46	297619.42	997398.73	1044764.86	1047366.13
21	94176.44	280059.01	297376.95	997394.22	1044724.96	1047330.73
20	94166.65	279801.98	297134.90	997389.71	1044685.08	1047295.37
19	94156.85	279545.37	296893.27	997385.19	1044645.23	1047260.03
18	94147.05	279289.17	296652.05	997380.67	1044605.41	1047224.74
17	94137.24	279033.39	296411.25	997376.15	1044565.62	1047189.47
16	94127.42	278778.02	296170.87	997371.62	1044525.85	1047154.23
15	94117.60	278523.07	295930.90	997367.09	1044486.12	1047119.03
14	94107.77	278268.53	295691.35	997362.55	1044446.41	1047083.86
13	94097.93	278014.40	295452.21	997358.01	1044406.73	1047048.72
12	94088.08	277760.69	295213.48	997353.46	1044367.08	1047013.62
11	94078.22	277507.38	294975.16	997348.91	1044327.45	1046978.54
10	94068.35	277254.48	294737.25	997344.35	1044287.86	1046943.50
9	94058.48	277001.99	294499.75	997339.80	1044248.29	1046908.49
8	94048.60	276749.90	294262.65	997335.23	1044208.75	1046873.51
7	94038.71	276498.22	294025.97	997330.67	1044169.23	1046838.57
6	94028.81	276246.95	293789.68	997326.10	1044129.75	1046803.65
5	94018.90	275996.08	293553.80	997321.52	1044090.29	1046768.77
4	94008.99	275745.61	293318.33	997316.94	1044050.86	1046733.92
3	93999.07	275495.54	293083.26	997312.36	1044011.46	1046699.10
2	93989.14	275245.88	292848.58	997307.77	1043972.08	1046664.31
1	93979.20	274996.61	292614.31	997303.18	1043932.73	1046629.56
0	93969.26	274747.74	292380.44	997298.58	1043893.41	1046594.83

20 ′	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tägente	Tomologarith. pro Secante
0	34202.02	36397.02	106417.78	953495.17	956106.59	1002701.42
1	34229.35	36429.97	106429.05	953439.86	956145.88	1002706.02
2	34256.68	36462.92	106440.33	953474.52	956185.15	1002710.62
3	34284.01	36495.88	106451.63	953509.15	956224.39	1002715.23
4	34311.33	36528.85	106462.94	953543.75	956263.60	1002719.84
5	34338.65	36561.82	106474.26	953578.32	956302.78	1002724.46
6	34365.97	36594.80	106485.59	953612.86	956341.94	1002729.08
7	34393.29	36627.79	106496.93	953647.37	956381.07	1002733.71
8	34420.60	36660.79	106508.28	953681.84	956420.18	1002738.34
9	34447.91	36693.79	106519.64	953716.28	956459.25	1002742.97
10	34475.22	36726.80	106531.01	953750.70	956498.31	1002747.61
11	34502.52	36759.82	106542.40	953785.08	956537.33	1002752.25
12	34529.82	36792.84	106553.80	953819.43	956576.33	1002756.90
13	34557.12	36825.87	106565.21	953853.75	956615.30	1002761.55
14	34584.42	36858.91	106576.63	953888.04	956654.24	1002766.20
15	34611.71	36891.95	106588.07	953922.30	956693.16	1002770.86
16	34639.00	36925.00	106599.51	953956.53	956732.05	1002775.52
17	34666.29	36958.06	106610.97	953990.73	956770.91	1002780.19
18	34693.57	36991.13	106622.43	954024.89	956809.75	1002784.86
19	34720.85	37024.20	106633.90	954059.03	956848.56	1002789.53
20	34748.13	37057.28	106645.40	954093.14	956887.35	1002794.21
21	34775.40	37090.37	106656.90	954127.21	956926.11	1002798.90
22	34802.67	37123.46	106668.42	954161.26	956964.84	1002803.58
23	34829.94	37156.56	106679.94	954195.27	957003.55	1002808.28
24	34857.21	37189.67	106691.48	954229.26	957042.23	1002812.97
25	34884.47	37222.78	106703.02	954263.21	957080.88	1002817.67
26	34911.73	37255.90	106714.58	954297.13	957119.51	1002822.38
27	34938.99	37289.03	106726.15	954331.03	957158.11	1002827.09
28	34966.24	37322.17	106737.74	954364.89	957196.69	1002831.80
29	34993.49	37355.32	106749.34	954398.73	957235.24	1002836.52
30	35020.74	37388.47	106760.94	954432.53	957273.77	1002841.24
31	35047.99	37421.63	106772.55	954466.30	957312.27	1002845.96
32	35075.23	37454.79	106784.18	954500.05	957350.74	1002850.69
33	35102.47	37487.97	106795.82	954533.76	957389.19	1002855.43
34	35129.70	37521.15	106807.47	954567.45	957427.61	1002860.16
35	35156.93	37554.34	106819.14	954601.10	957466.01	1002864.91
36	35184.16	37587.53	106830.81	954634.72	957504.38	1002869.65
37	35211.39	37620.73	106842.50	954668.32	957542.72	1002874.40
38	35238.62	37653.94	106854.20	954701.89	957581.04	1002879.16
39	35265.84	37687.16	106865.91	954735.42	957619.34	1002883.92
40	35293.06	37720.38	106877.63	954768.93	957657.61	1002888.68
41	35320.27	37753.61	106889.36	954802.40	957695.85	1002893.45
42	35347.48	37786.85	106901.10	954835.85	957734.07	1002898.22
43	35374.69	37820.10	106912.86	954869.27	957772.26	1002902.99
44	35401.90	37853.35	106924.63	954902.66	957810.43	1002907.77
45	35429.10	37889.61	106936.41	954936.02	957848.58	1002912.56
46	35456.30	37919.88	106948.20	954969.35	957886.69	1002917.35
47	35483.50	37953.16	106960.00	955002.65	957924.79	1002922.14
48	35510.70	37986.44	106971.82	955035.92	957962.86	1002926.94
49	35537.89	38019.73	106983.64	955069.16	958000.90	1002931.74
50	35565.08	38053.03	106995.48	955102.37	958038.92	1002936.54
51	35592.26	38086.33	107007.33	955135.56	958076.91	1002941.35
52	35619.44	38119.64	107019.19	955168.71	958114.88	1002946.17
53	35646.62	38152.96	107031.06	955201.84	958152.82	1002950.98
54	35673.80	38186.29	107042.95	955234.94	958190.74	1002955.81
55	35700.97	38219.62	107054.84	955268.01	958228.64	1002960.63
56	35728.14	38252.96	107066.75	955301.05	958266.51	1002965.46
57	35755.31	38286.31	107078.67	955334.06	958304.35	1002970.30
58	35782.48	38319.67	107090.60	955367.04	958342.17	1002975.14
59	35809.64	38353.03	107102.54	955399.99	958379.97	1002979.98
60	35836.79	38386.40	107114.50	955432.92	958417.74	1002984.83

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
60	93969.26	274747.74	292380.44	997298.58	1043893.41	1046594.83
59	93959.31	274499.27	292146.97	997293.98	1043854.12	1046560.14
58	93949.35	274251.20	291913.89	997289.38	1043814.85	1046525.48
57	93939.38	274003.52	291681.21	997284.77	1043775.61	1046490.85
56	93929.40	273756.23	291448.92	997280.16	1043736.40	1046456.25
55	93919.42	273509.34	291217.03	997275.54	1043697.22	1046421.68
54	93909.43	273262.84	290985.53	997270.92	1043658.06	1046387.14
53	93899.43	273016.74	290754.43	997266.29	1043618.93	1046352.63
52	93889.42	272771.02	290523.72	997261.66	1043579.82	1046318.16
51	93879.40	272525.69	290293.39	997257.03	1043540.75	1046283.72
50	93869.37	272280.75	290063.46	997252.39	1043501.69	1046249.30
49	93859.34	272036.20	289833.91	997247.75	1043462.67	1046214.92
48	93849.30	271792.04	289604.75	997243.10	1043423.67	1046180.57
47	93839.25	271548.26	289375.98	997238.45	1043384.70	1046146.25
46	93829.19	271304.87	289147.60	997233 80	1043345.76	1046111.96
45	93819.13	271061.86	288919.59	997229.14	1043306.84	1046077.70
44	93809.06	270819.23	288691.98	997224.48	1043267.95	1046043.47
43	93798.98	270576.99	288464.74	997219.81	1043229.09	1046009.27
42	93788.89	270335.13	288237.89	997215.14	1043190.25	1045975.11
41	93778.79	270093.64	288011.42	997210.47	1043151.44	1045940.97
40	93768.69	269852.54	287785.32	997205.79	1043112.65	1045906.86
39	93758.58	269611.81	287559.61	997201.10	1043073.89	1045872.79
38	93748.46	269371.47	287334.28	997196.42	1043035.16	1045838.74
37	93738.33	269131.49	287109.32	997191.72	1042996.45	1045804.73
36	93728.19	268891.90	286884.74	997187.03	1042957.77	1045770.74
35	93718.05	268652.67	286660.53	997182.33	1042919.12	1045736.79
34	93707.90	268413 83	286436.70	997177.62	1042880.49	1045702.87
33	93697.74	268175.35	286213.24	997172.91	1042841.89	1045668.97
32	93687.57	267937.25	285990.15	997168.20	1042803.31	1045635.11
31	93677.40	267699.51	285767.44	997163.48	1042764.76	1045601.27
30	93667.22	267462.15	285545.09	997158.76	1042726.23	1045567.47
29	93657.03	267225.16	285323.12	997154.04	1042687.73	1045533.70
28	93646.83	266988.53	285101.52	997149.31	1042649.26	1045499.95
27	93636.62	266752.27	284880.28	997144.57	1042610.81	1045466.24
26	93626.40	266516.38	284659.41	997139.84	1042572.39	1045432.55
25	93616.18	266280.85	284438.91	997135.09	1042533.99	1045398.90
24	93605.95	266045.69	284218.77	997130.35	1042495.62	1045365.28
23	93595.71	265810.89	283998.99	997125.60	1042457.28	1045331.68
22	93585.46	265576.45	283779.58	997120.84	1042418.96	1045298.11
21	93575.21	265342.38	283560.54	997116.08	1042380.66	1045264.58
20	93564.95	265108.67	283341.85	997111.32	1042342.39	1045231.07
19	93554.68	264875.31	283123.53	997106.55	1042304.15	1045197.60
18	93544.40	264642.32	282905.56	997101.78	1042265.93	1045164.15
17	93534.11	264409.69	282687.96	997097 01	1042227.74	1045130.73
16	93523.82	264177.41	282470.71	997092.23	1042189.57	1045097.34
15	93513.52	263945.49	282253.82	997087.44	1042151.42	1045063.98
14	93503.21	263713.92	282037.29	997082.65	1042113.31	1045030.65
13	93492.89	263482.71	281821.11	997077.86	1042075.21	1044997.35
12	93482.56	263251.86	281605.29	997073.06	1042057.14	1044964.08
11	93472.23	263021.36	281389.82	997068.26	1041999.10	1044930.84
10	93461.89	262791.21	281174.71	997063.46	1041961.08	1044897.63
9	93451.54	262561.41	280959.95	997058.65	1041923.09	1044864.44
8	93441.18	262331.96	280745.54	997053.83	1041885.12	1044831.29
7	93430.82	262102.86	280531.48	997049.02	1041847.18	1044798.16
6	93420.45	261874.11	280317.77	997044.19	1041809.26	1044765.06
5	93410.07	261645.71	280104.41	997039.37	1041771.36	1044731.99
4	93399.68	261417.66	279891.40	997034.54	1041733.49	1044698.95
3	93389.28	261189.95	279678.73	997029.70	1041695.65	1044665.94
2	93378.87	260962.59	279466.41	997024.86	1041657.83	1044632.96
1	93368.46	260735.58	279254.44	997020.02	1041620 03	1044600.01
0	93358.04	260508.91	279042.81	997015.17	1041582.26	1044567.08

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0	35836.79	38386.40	107114.50	955432.92	958417.74	1002984.83
1	35863.95	38419.78	107126.47	955465.81	958455.49	1002989.68
2	35891.10	38453.17	107138.44	955498.68	958493.21	1002994.53
3	35918.25	38486.56	107150.43	955531.52	958530.91	1002999.39
4	35945.40	38519.96	107162.44	955564.33	958568.59	1003004.26
5	35972.54	38553.37	107174.45	955597.11	958606.24	1003009.13
6	35999.68	38586.79	107186.47	955629.87	958643.86	1003014.00
7	36026.82	38620.21	107198.51	955662.59	958681.47	1003018.88
8	36053.95	38653.64	107210.56	955695.29	958719.04	1003023.76
9	36081.08	38687.08	107222.62	955727.96	958756.60	1003028.64
10	36108.21	38720.53	107234.69	955760.60	958794.13	1003033.53
11	36135.33	38753.98	107246.78	955793.21	958831.63	1003038.42
12	36162.46	38787.44	107258.87	955825.79	958869.12	1003043.32
13	36189.58	38820.91	107270.98	955858.35	958906.57	1003048.23
14	36216.69	38854.39	107283.10	955890.88	958944.01	1003053.13
15	36243.80	38887.87	107295.23	955923.38	958981.42	1003058.04
16	36270.91	38921.36	107307.37	955955.85	959018.81	1003062.96
17	36298.02	38954.86	107319.53	955988.29	959056.17	1003067.88
18	36325.12	38988.37	107331.70	956020.71	959093.51	1003072.80
19	36352.22	39021.89	107343.88	956053.10	959130.82	1003077.73
20	36379.32	39055.41	107356.07	956085.46	959168.12	1003082.66
21	36406.41	39088.94	107368.27	956117.79	959205.39	1003087.59
22	36433.50	39122.48	107380.48	956150.10	959242.63	1003092.54
23	36460.59	39156.02	107392.71	956182.37	959279.85	1003097.48
24	36487.68	39189.57	107404.95	956214.62	959317.05	1003102.43
25	36514.76	39223.13	107417.20	956246.85	959354.23	1003107.38
26	36541.84	39256.70	107429.46	956279.04	959391.38	1003112.34
27	36568.92	39290.28	107441.73	956311.21	959428.51	1003117.30
28	36595.99	39323.86	107454.02	956343.35	959465.61	1003122.27
29	36623.06	39357.45	107466.31	956375.46	959502.69	1003127.24
30	36650.13	39391.05	107478.62	956407.54	959539.75	1003132.21
31	36677.19	39424.66	107490.95	956439.60	959576.79	1003137.19
32	36704.25	39458.27	107503.28	956471.63	959613.80	1003142.17
33	36731.31	39491.89	107515.62	956503.63	959650.79	1003147.16
34	36758.36	39525.52	107527.98	956535.61	959687.76	1003152.15
35	36785.41	39559.16	107540.35	956567.56	959724.70	1003157.14
36	36812.46	39592.80	107552.73	956599.48	959761.62	1003162.14
37	36839.50	39626.45	107565.12	956631.37	959798.52	1003167.15
38	36866.54	39660.11	107577.53	956663.24	959835.40	1003172.16
39	36893.58	39693.78	107589.95	956695.08	959872.25	1003177.17
40	36920.62	39727.46	107602.37	956726.89	959909.08	1003182.19
41	36947.65	39761.14	107614.81	956758.68	959945.88	1003187.21
42	36974.68	39794.83	107627.27	956790.44	959982.67	1003192.23
43	37001.70	39828.53	107639.73	956822.17	960019.43	1003197.26
44	37028.72	39862.24	107652.21	956853.87	960056.17	1003202.29
45	37055.74	39895.96	107664.70	956885.55	960092.89	1003207.33
46	37082.76	39929.68	107677.20	956917.21	960129.58	1003212.37
47	37109.77	39963.41	107689.71	956948.83	960166.25	1003217.42
48	37136.78	39997.15	107702.24	956980.43	960202.90	1003222.47
49	37163.79	40030.89	107714.77	957012.00	960239.53	1003227.53
50	37190.80	40064.65	107727.32	957043.55	960276.13	1003232.59
51	37217.80	40098.41	107739.88	957075.06	960312.71	1003237.65
52	37244.80	40132.18	107752.46	957106.56	960349.27	1003242.72
53	37271.79	40165.96	107765.04	957138.02	960385.81	1003247.79
54	37298.78	40199.75	107777.64	957169.46	960422.33	1003252.87
55	37325.77	40233.54	107790.25	957200.87	960458.82	1003257.95
56	37352.75	40267.34	107802.87	957232.26	960495.29	1003263.03
57	37379.73	40301.15	107815.50	957263.62	960531.74	1003268.12
58	37406.71	40334.97	107828.15	957294.95	960568.17	1003273.21
59	37433.69	40368.79	107840.80	957326.26	960604.57	1003278.31
60	37460.66	40402.62	107853.47	957357.54	960640.96	1003283.41

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tagente	Tomologarith. pro Secante
60	93358.04	260508.91	279042.81	997015.17	1041582.26	1044567.08
59	93347.61	260282.58	278831.53	997010.32	1041544.51	1044534.19
58	93337.17	260056.59	278620.59	997005.47	1041506.79	1044501.32
57	93326.73	259830.95	278409.99	997000.61	1041469.09	1044468.48
56	93316.28	259605.64	278199.73	996995.74	1041431.41	1044435.67
55	93305.82	259380.68	277989.82	996990.87	1041393.76	1044402.89
54	93295.35	259156.06	277780.24	996986.00	1041356.14	1044370.13
53	93284.87	258931.77	277571.00	996981.12	1041318.53	1044337.41
52	93274.39	258707.82	277362.11	996976.24	1041280.96	1044304.71
51	93263.90	258484.21	277153.55	996971.36	1041243.40	1044272.04
50	93253.40	258260.94	276945.32	996966.47	1041205.87	1044239.40
49	93242.89	258038.00	276737.43	996961.58	1041168.37	1044206.79
48	93232.38	257815.39	276529.88	996956.68	1041130.88	1044174.21
47	93221.86	257593.12	276322.66	996951.77	1041093.43	1044141.65
46	93211.33	257371.18	276115.78	996946.87	1041055.99	1044109.12
45	93200.79	257149.57	275909.23	996941.96	1041018.58	1044076.62
44	93190.24	256928.30	275703.01	996937.04	1040981.19	1044044.15
43	93179.68	256707.35	275497.12	996932.12	1040943.83	1044011.71
42	93169.12	256486.74	275291.57	996927.20	1040906.49	1043979.29
41	93158.55	256266.45	275086.34	996922.27	1040869.18	1043946.90
40	93147.97	256046.49	274881.44	996917.34	1040831.88	1043914.54
39	93137.38	255826.86	274676.87	996912.41	1040794.61	1043882.21
38	93126.79	255607.56	274472.63	996907.46	1040757.37	1043849.90
37	93116.19	255388.58	274268.71	996902.52	1040720.15	1043817.63
36	93105.58	255169.92	274065.12	996897.57	1040682.95	1043785.38
35	93094.96	254951.60	273861.86	996892.62	1040645.77	1043753.15
34	93084.33	254733.59	273658.92	996887.66	1040608.62	1043720.96
33	93073.70	254515.91	273456.30	996882.70	1040571.49	1043688.79
32	93063.06	254298.55	273254.00	996877.73	1040534.39	1043656.65
31	93052.41	254081.51	273052.03	996872.76	1040497.31	1043624.54
30	93041.75	253864.79	272850.38	996867.79	1040460.25	1043592.46
29	93031.09	253648.39	272649.05	996862.81	1040423.21	1043560.40
28	93020.42	253432.31	272448.04	996857.83	1040386.20	1043528.37
27	93009.74	253216.55	272247.35	996852.84	1040349.21	1043496.37
26	92999.05	253001.11	272046.98	996847.85	1040312.24	1043464.39
25	92988.35	252785.98	271846.93	996842.86	1040275.30	1043432.44
24	92977.65	252571.17	271647.19	996837.86	1040238.38	1043400.52
23	92966.94	252356.67	271447.77	996832.85	1040201.48	1043368.63
22	92956.22	252142.49	271248.66	996827.84	1040164.60	1043336.76
21	92945.49	251928.63	271049.87	996822.83	1040127.75	1043304.92
20	92934.75	251715.07	270851.39	996817.81	1040090.92	1043273.11
19	92924.01	251501.83	270653.23	996812.79	1040054.12	1043241.32
18	92913.26	251288.90	270455.38	996807.77	1040017.33	1043209.56
17	92902.50	251076.29	270257.84	996802.74	1039980.57	1043177.83
16	92891.73	250863.98	270060.61	996797.71	1039943.83	1043146.13
15	92880.95	250651.98	269863.70	996792.67	1039907.11	1043114.45
14	92870.17	250440.29	269667.09	996787.63	1039870.42	1043082.79
13	92859.38	250228.91	269470.79	996782.58	1039833.75	1043051.17
12	92848.58	250017.84	269274.80	996777.53	1039797.10	1043019.57
11	92837.77	249807.07	269079.12	996772.47	1039760.47	1042988.00
10	92826.96	249596.61	268883.74	996767.41	1039723.87	1042956.45
9	92816.14	249386.45	268688.67	996762.35	1039687.29	1042924.94
8	92805.31	249176.60	268493.91	996757.28	1039650.73	1042893.44
7	92794.47	248967.06	268299.45	996752.21	1039614.19	1042861.98
6	92783.62	248757.81	268105.30	996747.15	1039577.67	1042830.54
5	92772.77	248548.87	267911.45	996742.05	1039541.18	1042799.13
4	92761.91	248340.23	267717.90	996736.97	1039504.71	1042767.74
3	92751.04	248131.90	267524.65	996731.88	1039468.26	1042736.38
2	92740.16	247923.86	267331.70	996726.79	1039431.83	1042705.05
1	92729.28	247716.12	267139.06	996721.69	1039395.43	1042673.74
0	92718.39	247508.69	266946.72	996716.59	1039359.04	1042642.46

22	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0	37460.66	40402.62	107853.47	957357.54	960640.96	1003283.41
1	37487.63	40436.46	107866.16	957388.80	960677.32	1003288.52
2	37514.59	40470.31	107878.85	957420.03	960713.66	1003293.63
3	37541.56	40504.17	107891.56	957451.23	960749.97	1003298.75
4	37568.52	40538.04	107904.27	957482.40	960786.27	1003303.86
5	37595.47	40571.91	107917.00	957513.56	960822.54	1003308.99
6	37622.43	40605.79	107929.75	957544.68	960858.80	1003314.12
7	37649.38	40639.68	107942.50	957575.78	960895.03	1003319.25
8	37676.32	40673.58	107955.27	957606.85	960931.24	1003324.38
9	37703.27	40707.48	107968.05	957637.90	960967.42	1003329.52
10	37730.21	40741.39	107980.84	957668.92	961003.59	1003334.67
11	37757.14	40775.31	107993.64	957699.91	961039.73	1003339.82
12	37784.08	40809.24	108006.46	957730.88	961075.86	1003344.97
13	37811.01	40843.18	108019.28	957761.83	961111.96	1003350.13
14	37837.94	40877.13	108032.12	957792.75	961148.04	1003355.29
15	37864.86	40911.08	108044.97	957823.64	961184.09	1003360.46
16	37891.78	40945.04	108057.84	957854.50	991220.13	1003365.63
17	37918.70	40979.01	108070.71	957885.35	961256.15	1003370.80
18	37945.62	41012.99	108083.60	957916.16	961292.14	1003375.98
19	37972.53	41046.97	108096.50	957946.95	961328.12	1003381.16
20	37999.44	41080.97	108109.42	957977.72	961364.07	1003386.35
21	38026.34	41114.97	108122.34	958008.45	961499.00	1003391.54
22	38053.24	41148.98	108135.28	958039.17	961435.91	1003396.74
23	38080.14	41183.00	108148.23	958069.86	961471.80	1003401.94
24	38107.04	41217.03	108161.19	958100.52	961507.66	1003407.15
25	38133.93	41251.06	108174.17	958131.16	961543.51	1003412.36
26	38160.82	41285.10	108187.15	958161.77	961579.34	1003417.57
27	38187.70	41319.15	108200.15	958192.36	961615.14	1003422.79
28	38214.59	41353.21	108213.16	958222.93	961650.93	1003428.01
29	38241.47	41387.28	108226.18	958253.45	961686.69	1003433.23
30	38268.34	41421.36	108239.22	958283.97	961722.43	1003438.47
31	38295.22	41455.44	108252.27	958314.45	961758.15	1003443.70
32	38322.09	41489.53	108265.33	958344.91	961793.85	1003448.94
33	38348.95	41523.63	108278.40	958375.35	961829.53	1003454.18
34	38375.82	41557.74	108291.49	958405.76	961865.19	1003459.43
35	38402.68	41591.86	108304.58	958436.15	961900.83	1003464.68
36	38429.53	41625.99	108317.69	958466.51	961936.45	1003469.94
37	38456.39	41660.12	108330.81	958496.85	961972.05	1003475.20
38	38483.24	41694.26	108343.95	958527.16	962007.62	1003480.47
39	38510.08	41728.41	108357.09	958557.45	962043.18	1003485.74
40	38536.93	41762.57	108370.25	958587.71	962078.72	1003491.01
41	38563.77	41796.74	108383.42	958617.95	962114.23	1003496.29
42	38590.60	41830.91	108396.61	958648.16	962149.74	1003501.57
43	38617.44	41865.09	108409.80	958678.35	962185.20	1003506.86
44	38644.27	41899.28	108423.01	958708.51	962220.66	1003512.15
45	38671.10	41933.48	108436.23	958738.65	962256.09	1003517.44
46	38697.92	41967.69	108449.47	958768.76	962291.50	1003522.74
47	38724.74	42001.91	108462.71	958798.85	962326.90	1003528.05
48	38751.56	42036.13	108475.97	958828.92	962362.27	1003533.35
49	38778.37	42070.36	108489.24	958858.96	962397.63	1003538.67
50	38805.18	42104.60	108502.52	958888.97	962432.96	1003543.98
51	38831.99	42138.85	108515.82	958918.97	962468.27	1003549.31
52	38858.80	42173.11	108529.13	958948.93	962503.56	1003554.63
53	38887.60	42207.38	108542.45	958978.88	962538.84	1003559.96
54	38912.39	42241.66	108555.78	959008.80	962574.09	1003565.30
55	38939.19	42275.94	108569.12	959038.69	962609.32	1003570.63
56	38965.98	42310.23	108582.48	959068.56	962644.54	1003575.98
57	38992.77	42344.53	108595.85	959098.41	962679.73	1003581.32
58	39019.55	42378.84	108609.24	959128.23	962714.91	1003586.68
59	39046.33	42413.16	108622.63	959158.03	962750.06	1003592.03
60	39073.11	42447.49	108636.04	959187.80	962785.19	1003597.39

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
60	92718.39	247508.69	266946.72	996716.59	1039359.04	1042642.46
59	92707.49	247301.55	266754.67	996711.48	1039322.68	1042611.20
58	92696.58	247094.70	266562.93	996706.37	1039286.34	1042579.97
57	92685.66	246888.16	266371.48	996701.25	1039250.03	1042548.77
56	92674.73	246681.91	266180.33	996696.14	1039213.73	1042517.60
55	92663.80	246475.96	265989.47	996691.01	1039177.46	1042486.44
54	92652.86	246270.30	265798.91	996685.88	1039141.20	1042455.32
53	92641.91	246064.94	265608.65	996680.75	1039104.97	1042424.22
52	92630.96	245859.87	265418.68	996675.62	1039068.76	1042393.15
51	92620.00	245655.09	265229.01	996670.48	1039032.58	1042362.10
50	92609.03	245450.61	265039.62	996665.33	1038996.41	1042331.08
49	92598.05	245246.42	264850.54	996660.18	1038960.27	1042300.09
48	92587.06	245042.52	264661.74	996655.03	1038924.14	1042269.12
47	92576.06	244838.91	264473.23	996649.87	1038888.04	1042238.17
46	92565.06	244635.59	264285.02	996644.71	1038851.96	1042207.25
45	92554.05	244432.56	264097.09	996639.54	1038815.91	1042176.36
44	92543.03	244229.82	263909.46	996634.37	1038779.87	1042145.50
43	92532.00	244027.36	263722.11	996629.20	1038743.85	1042114.65
42	92520.97	243825.19	263535.05	996624.02	1038707.86	1042083.84
41	92509.93	243623.31	263348.28	996618.84	1038671.88	1042053.05
40	92498.88	243421.72	263161.80	996613.65	1038635.93	1042022.28
39	92487.82	243220.41	262975.60	996608.46	1038600.00	1041991.55
38	92476.75	243019.38	262789.69	996603.26	1038564.09	1041960.83
37	92465.68	242818.64	262604.06	996598.06	1038528.20	1041930.14
36	92454.60	242618.19	262418.72	996592.85	1038492.34	1041899.48
35	92443.51	242418.01	262233.66	996587.64	1038456.49	1041868.84
34	92432.41	242218.12	262048.88	996582.43	1038420.66	1041838.23
33	92421.31	242018.51	261864.39	996577.21	1038384.86	1041807.64
32	92410.20	241819.18	261680.18	996571.99	1038349.07	1041777.08
31	92399.08	241620.13	261496.24	996566.77	1038313.31	1041746.55
30	92387.95	241422.36	261312.59	996561.53	1038277.57	1041716.03
29	92376.81	241222.86	261129.22	996556.30	1038241.85	1041685.55
28	92365.67	241024.65	260946.13	996551.06	1038206.15	1041655.09
27	92354.52	240826.72	260763.32	996545.82	1038170.47	1041624.65
26	92343.36	240629.06	260580.78	996540.57	1038134.81	1041594.24
25	92332.19	240431.68	260398.52	996535.32	1038099.17	1041563.85
24	92321.02	240234.57	260216.54	996530.06	1038063.55	1041533.49
23	92309.84	240037.74	260034.84	996524.80	1038027.95	1041503.15
22	92298.65	239841.18	259853.41	996519.53	1037992.38	1041472.84
21	92287.45	239644.90	259672.25	996514.26	1037956.82	1041442.55
20	92276.24	239448.89	259491.37	996508.99	1037921.28	1041412.29
19	92265.03	239253.16	259310.77	996503.71	1037885.77	1041382.05
18	92253.81	239057.69	259130.43	996498.43	1037850.27	1041351.84
17	92242.58	238862.50	258950.37	996493.14	1037814.80	1041321.65
16	92231.34	238667.58	258770.58	996487.85	1037779.34	1041291.49
15	92220.09	238472.93	258591.07	996482.56	1037743.91	1041261.35
14	92208.84	238278.55	258411.82	996477.26	1037708.50	1041231.24
13	92197.58	238084.44	258232.84	996471.95	1037673.10	1041201.15
12	92186.31	237890.60	258054.14	996466.65	1037637.73	1041171.08
11	92175.03	237697.03	257875.70	996461.33	1037602.37	1041141.04
10	92163.75	237503.72	257697.53	996456.02	1037567.04	1041111.03
9	92152.46	237310.68	257519.63	996450.69	1037531.73	1041081.03
8	92141.16	237117.91	257341.99	996445.37	1037496.44	1041051.07
7	92129.85	236925.40	257164.62	996440.04	1037461.16	1041021.12
6	92118.54	236733.16	256987.52	996434.70	1037425.91	1040991.20
5	92107.22	236541.18	256810.69	996429.37	1037390.68	1040961.31
4	92095.89	236349.46	256634.12	996424.02	1037355.46	1040931.44
3	92084.55	236158.01	256457.81	996418.68	1037320.27	1040901.59
2	92073.20	235966.83	256281.76	996413.32	1037285.09	1040871.77
1	92061.85	235775.90	256105.99	996407.97	1037249.94	1040841.97
0	92050.49	235585.24	255930.47	996402.61	1037214.81	1040812.20

23	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tagente	Tomologarith. pro Secante
0	39073.11	42447.49	108636.04	959187.80	962785.19	1003597.39
1	39099.89	42481.82	108649.46	959217.55	962820.31	1003602.76
2	39126.66	42516.16	108662.89	959247.28	962855.40	1003608.13
3	39153.43	42550.51	108676.34	959276.98	962890.48	1003613.50
4	39180.19	42584.87	108689.79	959306.66	962925.53	1003618.88
5	39206.05	42619.24	108703.26	959336.31	962960.57	1003624.26
6	39233.71	42653.62	108716.75	959365.94	962995.58	1003629.64
7	39260.47	42688.00	108730.24	959395.55	963030.58	1003635.04
8	39287.22	42722.39	108743.75	959425.13	963065.56	1003640.43
9	39313.97	42756.79	108757.27	959454.69	963100.52	1003645.83
10	39340.71	42791.20	108770.80	959484.22	963135.45	1003651.23
11	39367.45	42825.62	108784.35	959513.73	963170.37	1003656.64
12	39394.19	42860.05	108797.91	959543.22	963205.27	1003662.05
13	39420.93	42894.49	108811.48	959572.68	963240.15	1003667.47
14	39447.66	42928.94	108825.06	959602.12	963275.01	1003672.89
15	39474.39	42963.39	108838.66	959631.54	963309.85	1003678.32
16	39501.11	42997.85	108852.27	959660.93	963344.68	1003683.75
17	39527.83	43032.32	108865.89	959690.30	963379.48	1003689.18
18	39554.55	43066 80	108879.52	959719.65	963414.26	1003694.62
19	39581.27	43101.29	108893.17	959748.97	963449.03	1003700.06
20	39607.98	43135.79	108906.83	959778.27	963483.78	1003705.51
21	39634.69	43170.30	108920.50	959807.54	963518.50	1003710.96
22	39661.39	43204.81	108934.18	959836.79	963553.21	1003716.42
23	39688 09	43239.33	108947.88	959866.02	963587.90	1003721.88
24	39714.79	43273.86	108961.59	959895.23	963622.57	1003727.34
25	39741.48	43308.40	108975.31	959924.41	963657.22	1003732.81
26	39768.17	43342.95	108989.04	959953.57	963691.85	1003738.28
27	39794.86	43377.51	109002.79	959982.70	963726.46	1003743.76
28	39821.55	43412.08	109016.55	960011.81	963761.06	1003749.24
29	39848.23	43446.66	109030.32	960040.90	963795.63	1003754.73
30	39874.91	43481.24	109044.11	960069.97	963830.19	1003760.22
31	39901.58	43515.83	109057.91	960099.01	963864.73	1003765.72
32	39928.25	43550.43	109071.72	960128.03	963899.25	1003771.22
33	39954.92	43585.04	109085.54	960157.03	963933.75	1003776.72
34	39981.58	43619.66	109099.38	960186.00	963968.23	1003782.23
35	40008.24	43654.29	109113.23	960214.95	964002.69	1003787.74
36	40034.90	43688.93	109127.09	960243.88	964037.14	1003793.26
37	40061.56	43723.58	109140.97	960272.78	964071.56	1003798.78
38	40088.21	43758.23	109154.86	960301.66	964105.97	1003804.31
39	40114.86	43792.89	109168.76	960330.52	964140.36	1003809.84
40	40141.50	43827.56	109182.67	960359.36	964174.73	1003815.37
41	40168.14	43862.24	109196.59	960388.17	964209.08	1003820.91
42	40194.78	43896.93	109210.53	960416.96	964243.42	1003826.45
43	40221.41	43931.63	109224.48	960445.73	964277.73	1003832.00
44	40248.04	43966.34	109238.45	960474.48	964312.03	1003837.55
45	40274.67	44001.06	109252.43	960503.20	964346.31	1003843.11
46	40301.29	44035.78	109266.42	960531.90	964380.57	1003848.67
47	40327.91	44070.51	109280.42	960560.57	964414.81	1003854.24
48	40354.53	44105.25	109294.44	960589.23	964449.03	1003859.80
49	40381.14	44140.00	109308.47	960617.86	964483.24	1003865.38
50	40407.75	44174.76	109322.51	960646.47	964517.43	1003870.96
51	40434.36	44209.53	109336.56	960675.06	964551.60	1003876.54
52	40460.96	44244.31	109350.63	960703.62	964585.75	1003882.13
53	40487.56	44279.10	109364.71	960732.16	964619.88	1003887.72
54	40514.16	44313.90	109378.80	960760.68	964653.00	1003893.32
55	40540.75	44348.71	109392.91	960789.18	964688.10	1003898.92
56	40567.34	44383.53	109407.03	960817.65	964722.17	1003904.52
57	40593.93	44418.35	109421.16	960846.11	964756.24	1003910.13
58	40620.51	44453.18	109435.30	960874.54	964790.28	1003915.74
59	40647.09	44488.02	109449.46	960902.94	964824.31	1003921.36
60	40673.66	44522.87	109463.63	960931.33	964858.31	1003926.98

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tagente	Tomologarith. pro Secante
60	92050.49	235585.24	255930.47	996402.61	1037214.81	1040812.20
59	92039.12	235394.83	255755.21	996397.24	1037179.69	1040782.45
58	92027.74	235204.69	255580.22	996391.87	1037144.60	1040752.72
57	92016.35	235014.81	255405.48	996386.50	1037109.52	1040723.02
56	92004.96	234825.19	255231.01	996381.12	1037074.47	1040693.34
55	91993.56	234635.82	255056.80	996375.74	1037039.43	1040663.69
54	91982.15	234446.72	254882.84	996370.36	1037004.42	1040634.06
53	91970.73	234257.87	254709.15	996364.96	1036969.42	1040604.45
52	91959.31	234069.28	254535.71	996359.57	1036934.44	1040574.87
51	91947.88	233880.95	254362.53	996354.17	1036899.48	1040545.31
50	91936.44	233692.87	254189.61	996348.77	1036864.55	1040515.78
49	91924.99	233505.05	254016.94	996343.36	1036829.63	1040486.27
48	91913.53	233317.48	253844.53	996337.95	1036794.73	1040456.78
47	91902.07	233130.17	253672.38	996332.53	1036759.85	1040427.32
46	91890.60	232943.11	253500.48	996327.11	1036724.99	1040397.88
45	91879.12	232756.30	253328.83	996321.68	1036690.15	1040368.46
44	91867.63	232569.75	253157.44	996316.25	1036655.32	1040339.07
43	91856.14	232383.45	252986.30	996310.82	1036620.52	1040309.70
42	91844.64	232197.40	252815.41	996305.38	1036585.74	1040280.35
41	91833.13	232011.60	252644.78	996299.94	1036550.97	1040251.03
40	91821.61	231826.06	252474.40	996294.49	1036516.22	1040221.73
39	91810.08	231640.76	252304.26	996289.04	1036481.50	1040192.46
38	91798.55	231455.71	252134.38	996283.58	1036446.79	1040163.21
37	91787.01	231270.91	251964.75	996278.12	1036412.10	1040133.98
36	91775.46	231086.36	251795.37	996272.66	1036377.43	1040104.77
35	91763.90	230902.06	251626.24	996267.19	1036342.78	1040075.59
34	91752.34	230718.01	251457.35	996261.72	1036308.15	1040046.43
33	91740.77	230534.20	251288.71	996256.24	1036273.54	1040017.30
32	91729.19	230350.64	251120.32	996250.76	1036238.94	1039988.19
31	91717.60	230167.32	250952.18	996245.27	1036204.37	1039959.10
30	91706.01	229984.25	250784.28	996239.78	1036169.81	1039930.03
29	91694.41	229801.43	250616.63	996234.28	1036135.27	1039900.99
28	91682.80	229618.85	250449.23	996228.78	1036100.75	1039871.97
27	91671.18	229436.51	250282.07	996223.28	1036066.25	1039842.97
26	91659.55	229254.42	250115.15	996217.77	1036031.77	1039814.00
25	91647.91	229072.57	249948.47	996212.26	1035997.31	1039785.05
24	91636.27	228890.96	249782.04	996206.74	1035962.86	1039756.12
23	91624.62	228709.59	249615.86	996201.22	1035928.44	1039727.22
22	91612.96	228528.46	249449.91	996195.69	1035894.03	1039698.34
21	91601.30	228347.58	249284.21	996190.16	1035859.64	1039669.48
20	91589.63	228166.93	249118.74	996184.63	1035825.27	1039640.64
19	91577.95	227986.53	248953.52	996179.09	1035790.92	1039611.83
18	91566.26	227806.36	248788.54	996173.55	1035756.58	1039583.04
17	91554.56	227626.43	248623.80	996168.00	1035722.27	1039554.27
16	91542.86	227446.74	248459.29	996162.45	1035687.97	1039525.52
15	91531.15	227267.29	248295.03	996156.89	1035653.69	1039496.80
14	91519.43	227088.07	248131.00	996151.33	1035619.43	1039468.10
13	91507.70	226909.09	247967.21	996145.76	1035585.19	1039439.43
12	91495.96	226730.35	247803.66	996140.20	1035550.97	1039410.77
11	91484.22	226551.84	247640.34	996134.63	1035516.76	1039382.14
10	91472.47	226373.57	247477.26	996129.04	1035482.57	1039353.53
9	91460.71	226195.53	247314.42	996123.46	1035448.40	1039324.94
8	91448.95	226017.73	247151.81	996117.87	1035414.25	1039296.38
7	91437.18	225840.16	246989.43	996112.28	1035380.12	1039267.84
6	91425.40	225662.83	246827.29	996106.68	1035346.00	1039239.32
5	91413.61	225485.72	246665.38	996101.08	1035311.90	1039210.82
4	91401.81	225308.85	246503.71	996095.48	1035277.83	1039182.35
3	91390.00	225132.21	246342.27	996089.87	1035243.76	1039153.89
2	91378.19	224955.80	246181.06	996084.26	1035209.72	1039125.46
1	91366.37	224779.62	246020.08	996078.64	1035175.69	1039097.06
0	91354.54	224603.68	245859.33	996073.02	1035141.69	1039068.67

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Meſologarith. pro Tãgente	Tomologarith. pro Secante
0	40673.66	44522.87	109463.63	960931.33	964858.31	1003926.98
1	40700.23	44557.73	109477.81	960959.69	964892.30	1003932.61
2	40726.80	44592.60	109492.01	960988.03	964926.28	1003938.24
3	40753.37	44627.48	109506.22	961016.35	964960.23	1003943.88
4	40779.93	44662.37	109520.44	961044.65	964994.17	1003949.52
5	40806.49	44697.27	109534.67	961072.93	965028.09	1003955.16
6	40833.05	44732.17	109548.92	961101.18	965061.99	1003960.81
7	40859.60	44767.08	109563.18	961129.41	965095.87	1003966.46
8	40886.15	44802.00	109577.46	961157.62	965129.74	1003972.12
9	40912.69	44836.93	109591.74	961185.80	965163.59	1003977.78
10	40939.23	44871.87	109606.04	961213.97	965197.42	1003983.45
11	40965.77	44906.82	109620.36	961242.11	965231.23	1003989.12
12	40992.30	44941.78	109634.68	961270.23	965265.03	1003994.80
13	41018.83	44976.75	109649.02	961298.33	965298.81	1004000.48
14	41045.36	45011.73	109663.37	961326.41	965332.57	1004006.16
15	41071.89	45046.72	109677.74	961354 46	965366.31	1004011.85
16	41098.41	45081.72	109692.12	961382.50	965400.04	1004017.54
17	41124.93	45116.73	109706.51	961410.51	965433.75	1004023.24
18	41151.44	45151.74	109720.91	961438.50	965467.44	1004028.94
19	41177.95	45186.76	109735.33	961466.47	965501.12	1004034.65
20	41204.46	45221.79	109749.76	961494.41	965534.77	1004040.36
21	41230.96	45256.83	109764.20	961522.34	965568.41	1004046.07
22	41257.46	45291.88	109778.66	961550.24	965602.04	1004051.79
23	41283.95	45326.94	109793.13	961578.12	965635.64	1004057.52
24	41310.44	45362.01	109807.61	961605.99	965669.23	1004063.25
25	41336.93	45397.09	109822.11	961633.82	965702.80	1004068.98
26	41363.42	45432.18	109836.62	961661.64	965736.36	1004074.72
27	41389.90	45467.28	109851.14	961689.44	965769.89	1004080.46
28	41416.38	45502.39	109865.68	961717.21	965803.41	1004086.20
29	41442.85	45537.51	109880.23	961744.96	965836.92	1004091.95
30	41469.32	45572.64	109894.79	961772.70	965870.41	1004097.71
31	41495.79	45607.77	109909.36	961800.41	965903.87	1004103.47
32	41522.26	45642.91	109923.95	961828.09	965937.33	1004109.23
33	41548.72	45678.06	109938.55	961855.76	965970.76	1004115.00
34	41575.18	45713.22	109953.17	961883.41	966004.18	1004120.77
35	41601.63	45748.39	109967.79	961911.03	966037.58	1004126.55
36	41628.08	45783.57	109982.43	961938.64	966070.97	1004132.33
37	41654.53	45818.76	109997.09	961966.22	966104.34	1004138.12
38	41680.97	45853.96	110011.76	961993.78	966137.69	1004143.91
39	41707.41	45889.17	110026.44	962021.32	966171.03	1004149.70
40	41733.85	45924.39	110041.13	962048.84	966204.34	1004155.50
41	41760.28	45959.62	110055.84	962076.34	966237.65	1004161.31
42	41786.72	45994.86	110070.56	962103.82	966270.93	1004167.12
43	41813.13	46030.11	110085.29	962131.27	966304.20	1004172.93
44	41839.55	46065.37	110100.04	962158.71	966337.45	1004178.75
45	41865.97	46100.64	110114.80	962186.12	966370.69	1004184.57
46	41892.39	46135.91	110129.57	962213.51	966403.91	1004190.39
47	41918.80	46171.19	110144.36	962240.88	966437.11	1004196.22
48	41945.21	46206.48	110159.16	962268.24	966470.30	1004202.06
49	41971.61	46241.78	110173.97	962295.57	966503.46	1004207.90
50	41998.01	46277.09	110188.79	962322.87	966536.62	1004213.74
51	42024.41	46312.42	110203.63	962350.16	966569.75	1004219.59
52	42050.80	46347.76	110218.49	962377.43	966602.88	1004225.44
53	42077.19	46383.11	110233.35	962404.68	966635.98	1004231.30
54	42103.58	46418.46	110248.23	962431.90	966669.07	1004237.16
55	42129.96	46453.82	110263.13	962459.11	966702.14	1004243.03
56	42156.34	46489.19	110278.03	962486.29	966735.19	1004248.90
57	42182.72	46524.57	110292.95	962513.46	966768.23	1004254.78
58	42209.09	46559.96	110307.89	962540.60	966801.26	1004260.66
59	42235.46	46595.36	110322.83	962567.72	966834.26	1004266.54
60	42261.83	46630.77	110337.79	962594.83	966867.25	1004272.43

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
60	91354.54	224603.68	245859.33	996073.02	1035141.69	1039068.67
59	91342.71	224427.96	245698.82	996067.39	1035107.70	1039040.31
58	91330.87	224252.47	245538.53	996061.76	1035073.72	1039011.97
57	91319.02	224077.21	245378.48	996056.12	1035039.77	1038983.65
56	91307.16	223902.18	245218.65	996050.48	1035005.83	1038955.35
55	91295.29	223727.38	245059.05	996044.84	1034971.91	1038927.07
54	91283.42	223552.80	244899.68	996039.19	1034938.01	1038898.82
53	91271.54	223378.45	244740.54	996033.54	1034904.13	1038870.59
52	91259.65	223204.33	244581.63	996027.88	1034870.26	1038842.38
51	91247.75	223030.43	244422.94	996022.22	1034836.41	1038814.20
50	91235.84	222856.76	244264.48	996016.55	1034802.58	1038786.03
49	91223.93	222683.31	244106.24	996010.88	1034768.77	1038757.89
48	91212.01	222510.09	243948.23	996005.20	1034734.97	1038729.77
47	91200.08	222337.09	243790.45	995999.52	1034701.19	1038701.67
46	91188.14	222164.32	243632.89	995993.84	1034667.43	1038673.59
45	91176.20	221991.77	243475.55	995988.15	1034633.69	1038645.54
44	91164.25	221819.44	243318.44	995982.46	1034599.96	1038617.50
43	91152.29	221647.33	243161.55	995976.76	1034566.25	1038589.49
42	91140.32	221475.45	243004.89	995971.06	1034532.56	1038561.50
41	91128.35	221303.79	242848.44	995965.35	1034498.88	1038533.53
40	91116.37	221132.34	242692.22	995959.64	1034465.23	1038505.59
39	91104.38	220961.12	242536.22	995953.93	1034431.59	1038477.66
38	91092.38	220790.12	242380.44	995948.21	1034397.96	1038449.76
37	91080.38	220619.34	242224.88	995942.48	1034364.36	1038421.88
36	91068.37	220448.78	242069.54	995936.75	1034330.77	1038394.01
35	91056.35	220278.43	241914.42	995931.02	1034297.20	1038366.18
34	91044.32	220108.31	241759.52	995925.28	1034263.64	1038338.36
33	91032.28	219938.40	241604.84	995919.54	1034230.11	1038310.56
32	91020.24	219768.71	241450.38	995913.80	1034196.59	1038282.79
31	91008.19	219599.23	241296.13	995908.05	1034163.08	1038255.04
30	90996.13	219429.97	241141.10	995902.29	1034129.60	1038227.30
29	90984.06	219260.93	240988.29	995896.53	1034096.13	1038199.59
28	90971.98	219092.10	240834.69	995890.77	1034062.67	1038171.91
27	90959.90	218923.49	240681.32	995885.00	1034029.24	1038144.24
26	90947.81	218755.10	240528.15	995879.23	1033995.82	1038116.59
25	90935.71	218586.91	240375.20	995873.45	1033962.42	1038088.97
24	90923.61	218418.94	240222.47	995867.67	1033929.03	1038061.36
23	90911.50	218251.19	240069.95	995861.88	1033895.66	1038033.78
22	90899.38	218083.64	239917.64	995856.09	1033862.31	1038006.22
21	90887.25	217916.31	239765.55	995850.30	1033828.97	1037978.68
20	90875.11	217749.20	239613.67	995844.50	1033795.66	1037951.16
19	90862.97	217582.29	239462.01	995838.69	1033762.35	1037923.66
18	90850.82	217415.59	239310.55	995832.88	1033729.07	1037896.18
17	90838.66	217249.11	239159.31	995827.07	1033695.80	1037868.73
16	90826.49	217082.83	239008.28	995821.25	1033662.55	1037841.29
15	90814.32	216916.77	238857.46	995815.43	1033629.31	1037813.88
14	90802.14	216750.91	238706.85	995809.61	1033596.09	1037786.49
13	90789.95	216585.27	238556.45	995803.78	1033562.89	1037759.12
12	90777.75	216419.83	238406.25	995797.94	1033529.70	1037731.76
11	90765.54	216254.60	238256.27	995792.10	1033496.54	1037704.43
10	90753.33	216089.58	238106.50	995786.26	1033463.38	1037677.13
9	90741.11	215924.76	237956.93	995780.41	1033430.25	1037649.84
8	90728.88	215760.15	237807.58	995774.56	1033397.12	1037622.57
7	90716.64	215595.75	237658.43	995768.70	1033364.02	1037595.32
6	90704.40	215431.56	237509.49	995762.84	1033330.93	1037568.10
5	90692.15	215267.57	237360.75	995756.97	1033297.86	1037540.89
4	90679.89	215103.78	237212.22	995751.10	1033264.81	1037513.71
3	90667.62	214940.20	237063.90	995745.22	1033231.77	1037486.54
2	90655.35	214776.83	236915.78	995739.34	1033198.74	1037459.40
1	90643.07	214613.66	236767.87	995733.46	1033165.74	1037432.28
0	90630.78	214450.69	236620.16	995727.57	1033132.75	1037405.17

′	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0	42261.83	46630.77	110337.79	962594.83	966867.25	1004272.43
1	42288.19	46666.19	110352.77	962621.91	966900.23	1004278.32
2	42314.55	46701.62	110367.75	962648.97	966933.19	1004284.22
3	42340.90	46737.06	110382.75	962676.01	966966.13	1004290.12
4	42367.25	46772.51	110397.77	962703.03	966999.06	1004296.03
5	42393.60	46807.97	110412.79	962730.03	967031.97	1004301.94
6	42419.94	46843.43	110427.83	962757.01	967064.86	1004307.85
7	42446.28	46878.90	110442.89	962783.97	967097.74	1004313.77
8	42472.62	46914.38	110457.95	962810.90	967130.60	1004319.70
9	42498.95	46949.88	110473.03	962837.82	967163.45	1004325.63
10	42525.28	46985.39	110488.13	962864.72	967196.28	1004331.56
11	42551.61	47020.90	110503.24	962891.60	967229.10	1004337.50
12	42577.93	47056.43	110518.36	962918.45	967261.90	1004343.44
13	42604.25	47091.96	110533.49	962945.29	967294.68	1004349.39
14	42630.56	47127.51	110548.64	962972.11	967327.45	1004355.34
15	42656.87	47163.06	110563.80	962998.90	967360.20	1004361.30
16	42683.18	47198.63	110578.98	963025.68	967392.94	1004367.26
17	42709.49	47234.20	110594.17	963052.43	967425.66	1004373.22
18	42735.79	47269.78	110609.37	963079.17	967458.36	1004379.19
19	42762.09	47305.38	110624.58	963105.89	967491.05	1004385.17
20	42788.38	47340.98	110639.81	963132.58	967523.72	1004391.14
21	42814.67	47376.59	110655.06	963159.26	967556.38	1004397.13
22	42840.95	47412.22	110670.31	963185.91	967589.03	1004403.11
23	42867.23	47447.85	110685.58	963212.55	967621.65	1004409.11
24	42893.51	47483.49	110700.87	963239.16	967654.26	1004415.10
25	42919.79	47519.14	110716.16	963265.76	967686.86	1004421.10
26	42946.06	47554.81	110731.47	963292.33	967719.44	1004427.11
27	42972.33	47590.48	110746.80	963318.89	967752.01	1004433.12
28	42998.59	47626.16	110762.14	963345.42	967784.56	1004439.13
29	43024.85	47661.85	110777.49	963371.94	967817.09	1004445.15
30	43051.11	47697.55	110792.85	963398.44	967849.61	1004451.18
31	43077.36	47733.26	110808.23	963424.91	967882.11	1004457.20
32	43103.61	47768.99	110823.63	963451.37	967914.60	1004463.24
33	43129.86	47804.72	110839.03	963477.80	967947.08	1004469.27
34	43156.10	47840.46	110854.45	963504.22	967979.53	1004475.31
35	43182.34	47876.21	110869.89	963530.62	968011.98	1004481.36
36	43208.57	47911.97	110885.33	963556.99	968044.40	1004487.41
37	43234.80	47947.74	110900.79	963583.35	968076.82	1004493.47
38	43261.03	47983.52	110916.27	963609.69	968109.21	1004499.53
39	43287.26	48019.32	110931.76	963636.01	968141.60	1004505.59
40	43313.48	48055.12	110947.26	963662.31	968173.96	1004511.66
41	43339.70	48090.93	110962.77	963688.59	968206.32	1004517.73
42	43365.91	48126.75	110978.30	963714.84	968238.65	1004523.81
43	43392.12	48162.58	110993.85	963741.08	968270.98	1004529.89
44	43418.33	48198.42	111009.41	963767.31	968303.28	1004535.98
45	43444.53	48234.27	111024.98	963793.51	968335.57	1004542.07
46	43470.73	48270.14	111040.56	963819.69	968367.85	1004548.16
47	43496.92	48306.01	111056.16	963845.85	968400.11	1004554.26
48	43523.11	48341.89	111071.77	963871.99	968432.36	1004560.37
49	43549.30	48377.78	111087.40	963898.12	968464.59	1004566.48
50	43575.48	48413.68	111103.04	963924.22	968496.81	1004572.59
51	43601.66	48449.59	111118.69	963950.30	968529.01	1004578.71
52	43627.84	48485.52	111134.36	963976.37	968561.20	1004584.83
53	43654.01	48521.45	111150.04	964002.41	968593.38	1004590.96
54	43680.18	48557.39	111165.73	964028.44	968625.53	1004597.09
55	43706.34	48593.34	111181.44	964054.45	968657.68	1004603.23
56	43732.50	48629.31	111197.16	964080.44	968689.81	1004609.37
57	43758.66	48665.28	111212.90	964106.40	968721.92	1004615.52
58	43784.82	48701.26	111228.65	964132.35	968754.02	1004621.67
59	43810.97	48737.26	111244.42	964158.28	968786.11	1004627.82
60	43837.12	48773.26	111260.19	964184.20	968818.18	1004633.98

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
60	90630.78	214450.69	236620.16	995727.57	1033132.75	1037405.17
59	90618.48	214237.93	236472.65	995721.68	1033099.77	1037378.09
58	90606.17	214125.37	236325.35	995715.78	1033066.81	1037351.03
57	90593.86	213963.01	236178.26	995709.88	1033033.87	1037323.99
56	90581.54	213800.85	236031.36	995703.97	1033000.94	1037296.97
55	90569.21	213638.89	235884.67	995698.06	1032968.03	1037269.97
54	90556.88	213477.14	235738.18	995692.15	1032935.14	1037242.99
53	90544.54	213315.59	235591.89	995686.23	1032902.26	1037216.03
52	90532.19	213154.23	235445.81	995680.30	1032869.40	1037189.10
51	90519.83	212993.08	235299.92	995674.37	1032836.55	1037162.18
50	90507.46	212832.13	235154.24	995668.44	1032803.72	1037135.28
49	90495.09	212671.37	235008.75	995662.50	1032770.90	1037108.40
48	90482.71	212510.82	234863.47	995656.56	1032738.10	1037081.55
47	90470.32	212350.46	234718.38	995650.61	1032705.32	1037054.71
46	90457.92	212190.30	234573.49	995644.66	1032672.55	1037027.89
45	90445.51	212030.34	234428.80	995638.70	1032639.80	1037001.10
44	90433.10	211870.57	234284.31	995632.74	1032607.06	1036974.32
43	90420.68	211711.01	234140.02	995626.78	1032574.34	1036947.57
42	90408.25	211551.64	233995.93	995620.81	1032541.64	1036920.83
41	90395.82	211392.46	233852.03	995614.83	1032508.95	1036894.11
40	90383.38	211233.48	233708.33	995608.86	1032476.28	1036867.42
39	90370.93	211074.70	233564.82	995602.87	1032443.62	1036840.74
38	90358.47	210916.11	233421.52	995596.89	1032410.97	1036814.09
37	90346.00	210757.71	233278.40	995590.89	1032378.35	1036787.45
36	90333.53	210599.51	233135.48	995584.90	1032345.74	1036760.84
35	90321.05	210441.50	232992.76	995578.90	1032313.14	1036734.24
34	90308.56	210283.69	232850.23	995572.89	1032280.56	1036707.67
33	90296.06	210126.07	232707.90	995566.88	1032247.99	1036681.11
32	90283.56	209968.64	232565.75	995560.87	1032215.44	1036654.58
31	90271.05	209811.40	232423.81	995554.85	1032182.91	1036628.06
30	90258.53	209654.36	232282.05	995548.82	1032150.39	1036601.56
29	90246.00	209497.51	232140.49	995542.80	1032117.89	1036575.09
28	90233.47	209340.84	231999.11	995536.76	1032085.40	1036548.63
27	90220.93	209184.37	231857.94	995530.73	1032052.92	1036522.20
26	90208.38	209028.09	231716.95	995524.69	1032020.47	1036495.78
25	90195.82	208872.00	231576.15	995518.64	1031988.02	1036469.38
24	90183.25	208716.10	231435.54	995512.59	1031955.60	1036443.01
23	90170.68	208560.39	231295.13	995506.53	1031923.18	1036416.65
22	90158.10	208404.86	231154.90	995500.47	1031890.79	1036390.31
21	90145.51	208249.53	231014.86	995494.41	1031858.40	1036363.99
20	90132.91	208094.38	230875.01	995488.34	1031826.04	1036337.69
19	90120.31	207939.42	230735.35	995482.27	1031793.68	1036311.41
18	90107.70	207784.65	230595.88	995476.19	1031761.35	1036285.16
17	90095.08	207630.07	230456.60	995470.11	1031729.02	1036258.92
16	90082.45	207475.67	230317.51	995464.02	1031696.72	1036232.69
15	90069.82	207321.46	230178.60	995457.93	1031664.43	1036206.49
14	90057.18	207167.43	230039.88	995451.84	1031632.15	1036180.31
13	90044.53	207013.59	229901.34	995445.74	1031599.89	1036154.15
12	90031.87	206859.93	229762.99	995439.63	1031567.64	1036128.01
11	90019.21	206706.46	229624.83	995433.52	1031535.41	1036101.88
10	90006.54	206553.18	229486.85	995427.41	1031503.19	1036075.78
9	89993.86	206400.08	229349.06	995421.29	1031470.99	1036049.70
8	89981.17	206247.16	229211.45	995415.17	1031438.80	1036023.63
7	89968.48	206094.42	229074.03	995409.04	1031406.62	1035997.59
6	89955.78	205941.87	228936.79	995402.91	1031374.47	1035971.56
5	89943.07	205789.50	228799.74	995396.77	1031342.32	1035945.55
4	89930.35	205637.32	228662.86	995390.63	1031310.19	1035919.56
3	89917.62	205485.31	228526.18	995384.48	1031278.08	1035893.60
2	89904.89	205333.49	228389.67	995378.33	1031245.98	1035867.65
1	89892.15	205181.84	228253.34	995372.18	1031213.89	1035841.72
0	89879.40	205030.38	228117.20	995366.02	1031181.82	1035815.82

26 ′	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0	43837.12	48773.26	111260.19	964184.20	968818.18	1004633.98
1	43863.26	48809.27	111275.98	964210.09	968850.23	1004640.15
2	43889.40	48845.30	111291.79	964235.96	968882.27	1004646.31
3	43915.53	48881.33	111307.61	964261.82	968914.30	1004652.49
4	43941.66	48917.37	111323.45	964287.65	968946.31	1004658.66
5	43967.79	48953.43	111339.30	964313.47	968978.31	1004664.85
6	43993.92	48989.49	111355.16	964339.26	969010.30	1004671.03
7	44020.04	49025.57	111371.03	964365.04	969042.26	1004677.22
8	44046.16	49061.66	111386.92	964390.80	969074.22	1004683.42
9	44072.27	49097.75	111402.82	964416.54	969106.16	1004689.62
10	44098.38	49133.86	111418.74	964442.26	969138.09	1004695.82
11	44124.48	49169.97	111434.67	964467.96	969170.00	1004702.03
12	44150.58	49206.10	111450.62	964493.65	969201.89	1004708.25
13	44176.68	49242.24	111466.58	964519.31	969233.78	1004714.47
14	44202.78	49278.38	111482.55	964544.96	969265.65	1004720.69
15	44228.87	49314.54	111498.54	964570.58	969297.50	1004726.92
16	44254.96	49350.71	111514.54	964596.19	969329.34	1004733.15
17	44281.04	49386.89	111530.56	964621.78	969361.17	1004739.39
18	44307.12	49423.08	111546.59	964647.35	969392.98	1004745.63
19	44333.20	49459.28	111562.63	964672.90	969424.78	1004751.87
20	44359.27	49495.49	111578.69	964698.44	969456.56	1004758.12
21	44385.34	49531.71	111594.76	964723.95	969488.33	1004764.38
22	44411.40	49567.94	111610.84	964749.45	969520.09	1004770.64
23	44437.46	49604.18	111626.94	964774.92	969551.83	1004776.90
24	44463.52	49640.43	111643.06	964800.38	969583.55	1004783.17
25	44489.57	49676.69	111659.19	964825.82	969615.27	1004789.45
26	44515.62	49712.97	111675.33	964851.24	969646.97	1004795.72
27	44541.67	49749.25	111691.49	964876.65	969678.65	1004802.01
28	44567.71	49785.54	111707.66	964902.03	969710.32	1004808.29
29	44593.75	49821.85	111723.84	964927.40	969741.98	1004814.59
30	44619.78	49858.16	111740.04	964952.74	969773.63	1004820.88
31	44645.81	49894.49	111756.25	964978.07	969805.26	1004827.18
32	44671.84	49930.82	111772.48	965003.38	969836.87	1004833.49
33	44697.86	49967.17	111788.72	965028.68	969868.47	1004839.80
34	44723.88	50003.52	111804.98	965053.95	969900.06	1004846.11
35	44749.90	50039.89	111821.25	965079.20	969931.64	1004852.43
36	44775.91	50076.27	111837.53	965104.44	969963.20	1004858.76
37	44801.92	50112.66	111853.83	965129.66	969994.74	1004865.08
38	44827.92	50149.06	111870.14	965154.86	970026.28	1004871.42
39	44853.92	50185.47	111886.47	965180.04	970057.80	1004877.76
40	44879.92	50221.89	111902.81	965205.21	970089.30	1004884.10
41	44905.91	50258.32	111919.16	965230.35	970120.80	1004890.44
42	44931.90	50294.76	111935.53	965255.48	970152.27	1004896.80
43	44957.89	50331.21	111951.91	965280.59	970183.74	1004903.15
44	44983.87	50367.67	111968.31	965305.68	970215.19	1004909.51
45	45009.85	50404.15	111984.72	965330.75	970246.63	1004915.88
46	45035.82	50440.63	112001.15	965355.81	970278.05	1004922.25
47	45061.79	50477.13	112017.59	965380.84	970309.46	1004928.62
48	45087.76	50513.63	112034.05	965405.86	970340.86	1004935.00
49	45113.72	50550.15	112050.52	965430.86	970372.25	1004941.39
50	45139.68	50586.68	112067.00	965455.84	970403.62	1004947.77
51	45165.63	50623.22	112083.50	965480.81	970434.97	1004954.17
52	45191.58	50659.77	112100.01	965505.75	970466.32	1004960.56
53	45217.53	50696.33	112116.53	965530.68	970497.65	1004966.97
54	45243.47	50732.90	112133.07	965555.59	970528.97	1004973.37
55	45269.41	50769.48	112149.63	965580.48	970560.27	1004979.78
56	45295.35	50806.07	112166.20	965605.36	970591.56	1004986.20
57	45321.28	50842.67	112182.78	965630.21	970622.84	1004992.62
58	45347.21	50879.28	112199.38	965655.05	970654.10	1004999.05
59	45373.13	50915.91	112216.00	965679.87	970685.35	1005005.48
60	45399.05	50952.54	112232.62	965704.68	970716.58	1005011.91

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomolegarith. pro Secante
60	89879.40	205030.38	228117.20	995366.02	10311S1.82	1035815.80
59	89866.65	204879.10	227981.24	995359.85	1031149.77	1035789.91
58	89853.89	204728.00	227845.46	995353.69	1031117.73	1035764.04
57	89841.12	204577.08	227709.86	995347.51	1031085.70	1035738.18
56	89828.34	204426.34	227574.45	995341.34	1031053.69	1035712.35
55	89815.55	204275.78	227439.21	995335.15	1031021.69	1035686.53
54	89802.76	204125.40	227304.15	995328.97	1030989.70	1035660.74
53	89789.96	203975.19	227169.27	995322.78	1030957.74	1035634.96
52	89777.15	203825.17	227034.57	995316.58	1030925.78	1035609.20
51	89764.33	203675.32	226900.05	995310.38	1030893.84	1035583.46
50	89751.51	203525.65	226765.71	995304.18	1030861.91	1035557.74
49	89738.68	203376.15	226631.55	995297.97	1030830.00	1035532.04
48	89725.84	203226.83	226497.56	995291.75	1030798.11	1035506.35
47	89712.99	203077.69	226363.75	995285.53	1030766.22	1035480.69
46	89700.13	202928.73	226230.12	995279.31	1030734.35	1035455.04
45	89687.27	202779.94	226096.67	995273.08	1030702.50	1035429.42
44	89674.40	202631.33	225963.39	995266.85	1030670.66	1035403.81
43	89661.52	202482.89	225830.29	995260.61	1030638.83	1035378.22
42	89648.64	202334.62	225697.36	995254.37	1030607.02	1035352.65
41	89635.75	202186.53	225564.61	995248.13	1030575.22	1035327.10
40	89622.85	202038.62	225432.04	995241.88	1030543.44	1035301.56
39	89609.94	201890.88	225299.64	995235.62	1030511.67	1035276.05
38	89597.03	201743.31	225167.41	995229.36	1030479.91	1035250.55
37	89584.11	201595.92	225035.36	995223.10	1030448.17	1035225.08
36	89571.18	201448.69	224903.48	995216.83	1030416.45	1035199.62
35	89558.24	201301.64	224771.78	995210.55	1030384.73	1035174.18
34	89545.29	201154.77	224640.24	995204.28	1030353.03	1035148.76
33	89532.34	201008.06	224508.89	995197.99	1030321.35	1035123.35
32	89519.38	200861.53	224377.70	995191.71	1030289.68	1035097.97
31	89506.41	200715.16	224246.69	995185.41	1030258.02	1035072.60
30	89493.43	200568.97	224115.84	995179.12	1030226.37	1035047.26
29	89480.45	200422.95	223985.17	995172.82	1030194.74	1035021.93
28	89467.46	200277.10	223854.67	995166.51	1030163.13	1034996.62
27	89454.46	200131.42	223724.35	995160.20	1030131.53	1034971.32
26	89441.45	199985.90	223594.19	995153.89	1030099.94	1034946.05
25	89428.44	199840.56	223464.20	995147.57	1030068.36	1034920.80
24	89415.42	199695.39	223334.38	995141.24	1030036.80	1034895.56
23	89402.39	199550.38	223204.74	995134.92	1030005.26	1034870.34
22	89389.36	199405.54	223075.26	995128.58	1029973.72	1034845.14
21	89376.32	199260.87	222945.95	995122.24	1029942.20	1034819.96
20	89363.27	199116.37	222816.81	995115.90	1029910.70	1034794.79
19	89350.21	198972.04	222687.83	995109.56	1029879.20	1034769.65
18	89337.14	198827.87	222559.03	995103.20	1029847.73	1034744.52
17	89324.06	198683.87	222430.39	995096.85	1029816.26	1034719.41
16	89310.98	198540.03	222301.92	995090.49	1029784.81	1034694.32
15	89297.89	198396.36	222173.62	995084.12	1029753.37	1034669.25
14	89284.79	198252.86	222045.48	995077.75	1029721.95	1034644.19
13	89271.68	198109.52	221917.51	995071.38	1029690.54	1034619.16
12	89258.58	197966.35	221789.71	995065.00	1029659.14	1034594.14
11	89245.46	197823.34	221662.07	995058.61	1029627.75	1034569.14
10	89232.33	197680.50	221534.60	995052.23	1029596.38	1034544.16
9	89219.20	197537.82	221407.30	995045.83	1029565.03	1034519.19
8	89206.06	197595.31	221280.16	995039.44	1029533.68	1034494.25
7	89192.91	197252.96	221153.18	995033.03	1029502.35	1034469.32
6	89179.75	197110.77	221026.37	995026.63	1029471.03	1034444.41
5	89166.59	196968.74	220899.72	995020.22	1029439.73	1034419.52
4	89153.42	196826.88	220773.23	995013.80	1029408.44	1034394.64
3	89140.24	196685.18	220646.91	995007.38	1029377.16	1034369.79
2	89127.05	196543.64	220520.75	995000.95	1029345.90	1034344.95
1	89113.85	196402.27	220394.76	994994.52	1029314.65	1034320.13
0	89100.65	196261.05	220268.93	994988.09	1029283.41	1034295.32

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgenic	Tomologarith. pro Secante
0	45399.05	50952.54	112232.62	965704.68	970716.59	1005011.91
1	45424.97	50989.19	112249.26	965729.46	970747.81	1005018.35
2	45450.88	51025.85	112265.92	965754.23	970779.02	1005024.79
3	45476.79	51062.52	112282.59	965778.98	970810.22	1005031.24
4	45502.69	51099.19	112299.28	965803.71	970841.41	1005037.70
5	45528.59	51135.88	112315.98	965828.42	970872.58	1005044.15
6	45554.49	51172.59	112332.69	965853.12	970903.74	1005050.62
7	45580.38	51209.30	112349.42	965877.80	970934.88	1005057.08
8	45606.27	51246.02	112366.16	965902.46	970966.01	1005063.55
9	45632.16	51282.75	112382.92	965927.10	970997.13	1005070.03
10	45658.04	51319.50	112399.69	965951.73	971028.24	1005076.51
11	45683.92	51356.25	112416.48	965976.34	971059.33	1005083.00
12	45709.79	51393.02	112433.28	966000.93	971090.41	1005089.49
13	45735.66	51429.80	112450.10	966025.50	971121.48	1005095.98
14	45761.53	51466.58	112466.93	966050.05	971152.54	1005102.48
15	45787.39	51503.38	112483.77	966074.59	971183.58	1005108.99
16	45813.25	51540.19	112500.63	966099.11	971214.61	1005115.50
17	45839.10	51577.02	112517.50	966123.61	971245.62	1005122.01
18	45864.95	51613.85	112534.39	966148.10	971276.62	1005128.53
19	45890.80	51650.69	112551.29	966172.57	971307.61	1005135.05
20	45916.64	51687.55	112568.21	966197.02	971338.59	1005141.58
21	45942.48	51724.41	112585.14	966221.45	971369.56	1005148.11
22	45968.32	51761.29	112602.09	966245.86	971400.51	1005154.64
23	45994.15	51798.18	112619.05	966270.26	971431.45	1005161.18
24	46019.98	51835.08	112636.03	966294.64	971462.37	1005167.73
25	46045.80	51871.99	112653.02	966319.00	971493.29	1005174.28
26	46071.62	51908.91	112670.03	966343.35	971524.19	1005180.84
27	46097.44	51945.84	112687.05	966367.68	971555.08	1005187.40
28	46123.25	51982.78	112704.08	966391.99	971585.95	1005193.96
29	46149.06	52019.72	112721.13	966416.28	971616.82	1005200.53
30	46174.86	52056.70	112738.19	966440.56	971647.67	1005207.11
31	46200.66	52093.68	112755.27	966464.82	971678.51	1005213.69
32	46226.46	52130.67	112772.37	966489.06	971709.33	1005220.27
33	46252.25	52167.67	112789.48	966513.29	971740.14	1005226.86
34	46278.04	52204.68	112806.60	966537.49	971770.94	1005233.45
35	46303.82	52241.70	112823.74	966561.68	971801.73	1005240.05
36	46329.60	52278.74	112840.89	966585.86	971832.51	1005246.65
37	46355.38	52315.78	112858.06	966610.01	971863.27	1005253.26
38	46381.15	52352.84	112875.24	966634.15	971894.02	1005259.87
39	46406.92	52389.90	112892.44	966658.28	971924.76	1005266.48
40	46432.69	52426.98	112909.65	966682.38	971955.49	1005273.11
41	46458.45	52464.07	112926.88	966706.47	971986.20	1005279.73
42	46484.21	52501.17	112944.12	966730.54	972016.90	1005286.36
43	46509.96	52538.29	112961.37	966754.59	972047.59	1005293.00
44	46535.71	52575.41	112978.64	966778.63	972078.27	1005299.64
45	46561.45	52612.54	112995.93	966802.65	972108.93	1005306.28
46	46587.19	52649.69	113013.23	966826.65	972139.58	1005312.93
47	46612.93	52686.85	113030.55	966850.64	972170.22	1005319.58
48	46638.66	52724.02	113047.88	966874.61	972200.85	1005326.24
49	46664.39	52761.20	113065.22	966898.56	972231.47	1005332.90
50	46690.12	52798.39	113082.58	96692.250	972262.07	1005339.57
51	46715.84	52835.59	113099.96	966946.42	972292.66	1005346.24
52	46741.56	52872.81	113117.35	966970.32	972323.24	1005352.92
53	46767.27	52910.04	113134.75	966994.20	972353.81	1005359.60
54	46792.98	52947.27	113152.17	967018.07	972384.36	1005366.29
55	46818.69	52984.52	113169.61	967041.92	972414.90	1005372.98
56	46844.39	53021.78	113187.06	967065.76	972445.43	1005379.68
57	46870.09	53059.06	113204.52	967089.58	972475.95	1005386.38
58	46895.78	53096.34	113222.00	967113.38	972506.46	1005393.08
59	46921.47	53133.64	113239.50	967137.16	972536.95	1005399.79
60	46947.16	53170.94	113257.01	967160.93	972567.44	1005406.51

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
60	89100.65	196261.05	220268.93	994988.09	1029283.41	1034295.32
59	89087.44	196120.00	220143.26	994981.65	1029252.19	1034270.54
58	89074.22	195979.10	220017.75	994975.21	1029220.98	1034245.77
57	89061.00	195838.37	219892.40	994968.76	1029189.78	1034221.02
56	89047.77	195697.80	219767.21	994962.30	1029158.59	1034196.29
55	89034.53	195557.39	219642.19	994955.85	1029127.42	1034171.58
54	89021.28	195417.13	219517.33	994949.38	1029096.26	1034146.88
53	89008.02	195277.04	219392.62	994942.92	1029065.12	1034122.20
52	88994.76	195137.11	219268.08	994936.45	1029033.99	1034097.54
51	88981.49	194997.33	219143.70	994929.97	1029002.87	1034072.90
50	88968.21	194857.71	219019.47	994923.49	1028971.76	1034048.27
49	88954.93	194718.26	218895.41	994917.00	1028940.67	1034023.67
48	88941.64	194578.96	218771.50	994910.51	1028909.59	1033999.07
47	88928.34	194439.81	218647.75	994904.02	1028878.52	1033974.50
46	88915.03	194300.83	218524.17	994897.52	1028847.46	1033949.95
45	88901.71	194162.00	218400.74	994891.01	1028816.42	1033925.41
44	88888.39	194023.33	218277.46	994884.50	1028785.39	1033900.89
43	88875.06	193884.81	218154.35	994877.99	1028754.38	1033876.39
42	88861.72	193746.45	218031.39	994871.47	1028723.38	1033851.90
41	88848.37	193608.25	217908.59	994864.95	1028692.39	1033827.43
40	88835.02	193470.20	217785.94	994858.42	1028661.41	1033802.98
39	88821.66	193332.31	217663.46	994851.89	1028630.44	1033778.55
38	88808.29	193194.57	217541.12	994845.35	1028599.49	1033754.14
37	88794.92	193056.98	217418.95	994838.81	1028568.55	1033729.74
36	88781.54	192919.56	217296.93	994832.27	1028537.63	1033705.36
35	88768.15	192782.28	217175.06	994825.72	1028506.71	1033681.00
34	88754.75	192645.16	217053.35	994819.16	1028475.81	1033656.65
33	88741.34	192508.19	216931.80	994812.60	1028444.92	1033632.32
32	88727.93	192371.38	216810.40	994806.04	1028414.05	1033608.01
31	88714.53	192234.72	216689.15	994799.47	1028383.18	1033583.72
30	88701.08	192098.21	216568.06	994792.89	1028352.33	1033559.44
29	88687.64	191961.86	216447.12	994786.31	1028321.49	1033535.18
28	88674.20	191825.65	216326.33	994779.73	1028290.67	1033510.94
27	88660.75	191689.60	216205.70	994773.14	1028259.86	1033486.71
26	88647.29	191553.70	216085.22	994766.55	1028229.06	1033462.51
25	88633.83	191417.95	215964.89	994759.95	1028198.27	1033438.32
24	88620.36	191282.36	215844.71	994753.35	1028167.49	1033414.14
23	88606.88	191146.91	215724.69	994746.74	1028136.73	1033389.99
22	88593.39	191011.62	215604.82	994740.13	1028105.98	1033365.85
21	88579.89	190876.47	215485.10	994733.52	1028075.24	1033341.72
20	88566.39	190741.47	215365.53	994726.89	1028044.51	1033317.62
19	88552.88	190606.63	215246.11	994720.27	1028013.80	1033293.53
18	88539.36	190471.93	215126.84	994713.64	1027983.10	1033269.46
17	88525.83	190337.38	215007.72	994707.00	1027952.41	1033245.41
16	88512.30	190202.99	214888.75	994700.36	1027921.73	1033221.37
15	88498.76	190068.74	214769.93	994693.72	1027891.07	1033197.35
14	88485.21	189934.64	214651.27	994687.07	1027860.42	1033173.35
13	88471.66	189800.68	214532.75	994680.42	1027829.78	1033149.36
12	88458.10	189666.88	214414.37	994673.76	1027799.15	1033125.39
11	88444.53	189533.22	214296.15	994667.10	1027768.53	1033101.44
10	88430.95	189399.71	214178.08	994660.43	1027737.93	1033077.50
9	88417.36	189266.34	214060.15	994653.76	1027707.34	1033053.58
8	88403.77	189133.13	213942.38	994647.08	1027676.76	1033029.68
7	88390.17	189000.06	213824.75	994640.40	1027646.19	1033005.80
6	88376.56	188867.13	213707.26	994633.71	1027615.64	1032981.93
5	88362.94	188734.36	213589.93	994627.02	1027585.10	1032958.08
4	88349.32	188601.72	213472.74	994620.32	1027554.57	1032934.24
3	88335.69	188469.24	213355.70	994613.62	1027524.05	1032910.42
2	88322.05	188336.90	213238.80	994606.92	1027493.54	1032886.62
1	88308.41	188204.70	213122.05	994600.21	1027463.05	1032862.84
0	88294.76	188072.65	213005.45	994593.49	1027432.56	1032839.07

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tägente	Tomologarith. pro Secante
0	46947. 16	53170. 94	113257. 01	967160. 93	972567. 44	1005406. 51
1	46972. 84	53208. 26	113274. 53	967184. 68	972597. 91	1005413. 23
2	46998. 52	53245. 59	113292. 07	967208. 41	972628. 37	1005419. 95
3	47024. 19	53282. 93	113309. 62	967232. 13	972658. 81	1005426. 68
4	47049. 86	53320. 29	113327. 19	967255. 83	972689. 25	1005433. 41
5	47075. 53	53357. 65	113344. 78	967279. 52	972719. 67	1005440. 15
6	47101. 19	53395. 03	113362. 38	967303. 19	972750. 08	1005446. 90
7	47126. 85	53432. 42	113379. 99	967326. 84	972780. 48	1005453. 64
8	47152. 50	53469. 82	113397. 62	967350. 47	972810. 87	1005460. 40
9	47178. 15	53507. 23	113415. 27	967374. 09	972841. 24	1005467. 15
10	47203. 80	53544. 65	113432. 93	967397. 69	972871. 61	1005473. 91
11	47229. 44	53582. 08	113450. 60	967421. 28	972901. 96	1005480. 68
12	47255. 08	53619. 53	113468. 29	967444. 85	972932. 30	1005487. 45
13	47280. 71	53656. 99	113486. 00	967468. 40	972962. 63	1005494. 23
14	47306. 34	53694. 46	113503. 72	967491. 94	972992. 95	1005501. 01
15	47331. 97	53731. 94	113521. 46	967515. 46	973023. 25	1005507. 80
16	47357. 59	53769. 43	113539. 21	967538. 96	973053. 54	1005514. 59
17	47383. 21	53806. 94	113556. 98	967562. 45	973083. 83	1005521. 38
18	47408. 82	53844. 45	113574. 76	967585. 92	973114. 10	1005528. 18
19	47434. 43	53881. 98	113592. 55	967609. 37	973144. 36	1005534. 99
20	47460. 04	53919. 52	113610. 36	967632. 81	973174. 60	1005541. 79
21	47485. 64	53957. 07	113628. 19	967656. 23	973204. 84	1005548. 61
22	47511. 24	53994. 64	113646. 03	967679. 63	973235. 06	1005555. 43
23	47536. 83	54032. 21	113663. 89	967703. 02	973265. 27	1005562. 25
24	47562. 42	54069. 80	113681. 76	967726. 40	973295. 47	1005569. 08
25	47588. 01	54107. 40	113699. 65	967749. 75	973325. 66	1005575. 91
26	47613. 59	54145. 01	113717. 55	967773. 09	973355. 84	1005582. 75
27	47639. 17	54182. 63	113735. 47	967796. 42	973386. 01	1005589. 59
28	47664. 74	54220. 27	113753. 40	967819. 72	973416. 16	1005596. 44
29	47690. 31	54257. 91	113771. 35	967843. 01	973446. 31	1005603. 20
30	47715. 88	54295. 57	113789. 32	967866. 29	973476. 44	1005610. 15
31	47741. 44	54333. 24	113807. 30	967889. 55	973506. 56	1005617. 01
32	47767. 00	54370. 92	113825. 29	967912. 79	973536. 67	1005623. 88
33	47792. 55	54408. 62	113843. 30	967936. 02	973566. 77	1005630. 75
34	47818. 10	54446. 32	113861. 33	967959. 23	973596. 85	1005637. 62
35	47843. 64	54484. 04	113879. 37	967982. 43	973626. 93	1005644. 51
36	47869. 18	54521. 77	113897. 43	968005. 60	973656. 99	1005651. 39
37	47894. 72	54559. 51	113915. 50	968028. 77	973687. 05	1005658. 28
38	47920. 26	54597. 26	113933. 59	968051. 91	973717. 09	1005665. 18
39	47945. 79	54635. 03	113951. 69	968075. 04	973747. 12	1005672. 08
40	47971. 31	54672. 81	113969. 81	968098. 16	973777. 14	1005678. 98
41	47996. 83	54710. 60	113987. 94	968121. 26	973807. 15	1005685. 89
42	48022. 35	54748. 40	114006. 09	968144. 34	973837. 14	1005692. 80
43	48047. 86	54786. 21	114024. 25	968167. 41	973867. 13	1005699. 72
44	48073. 37	54824. 04	114042. 43	968190. 46	973897. 12	1005706. 65
45	48098. 88	54861. 88	114060. 62	968213. 49	973927. 07	1005713. 57
46	48124. 38	54899. 73	114078. 83	968236. 51	973957. 02	1005720. 51
47	48149. 88	54937. 59	114097. 06	968259. 52	973986. 96	1005727. 45
48	48175. 37	54975. 46	114115. 30	968282. 50	974016. 89	1005734. 39
49	48200. 86	55013. 35	114133. 56	968305. 48	974046. 81	1005741. 34
50	48226. 34	55051. 25	114151. 83	968328. 43	974076. 72	1005748. 29
51	48251. 82	55089. 16	114170. 12	968351. 37	974106. 62	1005755. 24
52	48277. 30	55127. 08	114188. 42	968374. 30	974136. 50	1005762. 21
53	48302. 77	55165. 02	114206. 74	968397. 20	974166. 38	1005769. 17
54	48328. 24	55202. 97	114225. 07	968420. 10	974196. 24	1005776. 14
55	48353. 70	55240. 93	114243. 42	968442. 97	974226. 09	1005783. 12
56	48379. 16	55278. 90	114261. 79	968465. 83	974255. 94	1005790. 10
57	48404. 63	55316. 88	114280. 17	968488. 68	974285. 77	1005797. 09
58	48430. 07	55354. 88	114298. 57	968511. 51	974315. 59	1005804. 08
59	48455. 52	55392. 88	114316. 98	968534. 32	974345. 40	1005811. 07
60	48480. 96	55430. 90	114335. 41	968557. 12	974375. 20	1005818. 07

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60	88294.76	188072.65	213005.45	994593.49	1027432.56	1032839.07
59	88281.10	187940.74	212888.99	994586.77	1027402.09	1032815.32
58	88267.43	187808.98	212772.67	994580.05	1027371.63	1032791.59
57	88253.75	187677.36	212656.51	994573.32	1027341.19	1032767.87
56	88240.07	187545.88	212540.48	994566.59	1027310.75	1032744.17
55	88226.38	187414.55	212424.60	994559.85	1027280.33	1032720.48
54	88212.68	187283.36	212308.87	994553.10	1027249.92	1032696.81
53	88198.98	187152.32	212193.28	994546.36	1027219.52	1032673.16
52	88185.27	187021.41	212077.83	994539.60	1027189.13	1032649.53
51	88171.55	186890.64	211962.53	994532.85	1027158.76	1032625.91
50	88157.82	186760.03	211847.37	994526.09	1027128.39	1032602.31
49	88144.09	186629.55	211732.35	994519.32	1027098.04	1032578.72
48	88130.35	186499.21	211617.48	994512.55	1027067.70	1032555.15
47	88116.60	186369.02	211502.74	994505.77	1027037.37	1032531.60
46	88102.84	186238.96	211388.15	994498.99	1027007.05	1032508.06
45	88089.07	186109.05	211273.71	994492.20	1026976.75	1032484.54
44	88075.30	185979.28	211159.40	994485.41	1026946.46	1032461.04
43	88061.52	185849.65	211045.23	994478.62	1026916.17	1032437.56
42	88047.73	185720.15	210931.21	994471.82	1026885.90	1032414.08
41	88033.94	185590.80	210817.33	994465.01	1026855.64	1032390.63
40	88020.14	185461.59	210703.59	994458.21	1026825.40	1032367.19
39	88006.33	185332.52	210589.98	994451.39	1026795.16	1032343.77
38	87992.51	185203.58	210476.52	994444.57	1026764.94	1032320.37
37	87978.69	185074.79	210363.20	994437.75	1026734.73	1032296.98
36	87964.86	184946.13	210250.02	994430.92	1026704.53	1032273.60
35	87951.02	184817.61	210136.98	994424.09	1026674.34	1032250.25
34	87937.17	184689.23	210024.08	994417.25	1026644.16	1032226.91
33	87923.32	184560.99	209911.31	994410.41	1026613.99	1032203.58
32	87909.46	184432.89	209798.69	994403.56	1026583.84	1032180.28
31	87895.59	184304.92	209686.20	994396.71	1026553.69	1032156.99
30	87881.71	184177.09	209573.85	994389.85	1026523.56	1032133.71
29	87867.83	184049.39	209461.64	994382.99	1026493.44	1032110.45
28	87853.94	183921.84	209349 57	994376.12	1026463.33	1032087.21
27	87840.04	183794.42	209237.64	994369.25	1026433.23	1032063.98
26	87826.13	183667.13	209125.84	994362.38	1026403.15	1032040.77
25	87812.22	183539.99	209014.18	994355.49	1026373.07	1032017.57
24	87798.30	183412.97	208902.65	994348.61	1026343.01	1031994.40
23	87784.37	183286.10	208791.27	994341.72	1026312.95	1031971.23
22	87770.43	183159.36	208680.02	994334.82	1026282.91	1031948.09
21	87756.49	183032.75	208568.90	994327.92	1026252.88	1031924.96
20	87742.54	182906.28	208457.92	994321.02	1026222.86	1031901.84
19	87728.58	182779.94	208347.08	994314.11	1026192.85	1031878.74
18	87714.61	182653.74	208236.37	994307.20	1026162.86	1031855.66
17	87700.64	182527.67	208125.80	994300.28	1026132.87	1031832.59
16	87686.66	182401.73	208015.36	994293.35	1026102.90	1031809.54
15	87672.67	182275.93	207905.06	994286.43	1026072.93	1031786.51
14	87658.68	182150.26	207794.89	994279.49	1026042.98	1031763.49
13	87644.68	182024.73	207684.86	994272.55	1026013.04	1031740.48
12	87630.67	181899.32	207574.96	994265.61	1025983.11	1031717.50
11	87616.65	181774.05	207465.19	994258.66	1025953.19	1031694.52
10	87602.62	181648.92	207355.56	994251.71	1025923.28	1031671.57
9	87588.59	181523.91	207246.06	994244.76	1025893.38	1031648.63
8	87574.55	181399.04	207136.70	994237.79	1025863.50	1031625.70
7	87560.50	181274.30	207027.46	994230.83	1025833.62	1031602.80
6	87546.45	181149.69	206918.36	994223.86	1025803.76	1031579.90
5	87532.39	181025.21	206809.40	994216.88	1025773.91	1031557.03
4	87518.32	180900.86	206700.56	994209.90	1025744.06	1031534.17
3	87504.24	180776.64	206591.86	994202.91	1025714.23	1031511.32
2	87490.16	180652.56	206483.28	994195.92	1025684.41	1031488.49
1	87476.07	180528.60	206374.84	994188.93	1025654.60	1031465.68
0	87461.97	180404.78	206266.53	994181.93	1025624.80	1031442.88

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tagente	Tomologarith. pro Secante
0	48480.96	55430.90	114335.41	968557.12	974375.20	1005818.07
1	48506.40	55468.94	114353.85	968579.91	974404.99	1005825.08
2	48531.84	55506.98	114372.31	968602.67	974434.76	1005832.09
3	48557.27	55545.04	114390.78	968625.42	974464.53	1005839.10
4	48582.70	55583.11	114409.27	968648.16	974494.28	1005846.12
5	48608.12	55621.19	114427.78	968670.88	974524.03	1005853.15
6	48633.54	55659.29	114446.30	968693.59	974553.76	1005860.18
7	48658.95	55697.39	114464.84	968716.28	974583.49	1005867.21
8	48684.36	55735.51	114483.39	968738.95	974613.20	1005874.25
9	48709.77	55773.64	114501.96	968761.61	974642.90	1005881.29
10	48735.17	55811.79	114520.55	968784.25	974672.59	1005888.34
11	48760.57	55849.94	114539.15	968806.88	974702.27	1005895.39
12	48785.97	55888.11	114557.76	968829.49	974731.94	1005902.45
13	48811.36	55926.29	114576.39	968852.09	974761.60	1005909.52
14	48836.74	55964.48	114595.04	968874.67	974791.25	1005916.58
15	48862.12	56002.69	114613.70	968897.23	974820.89	1005923.66
16	48887.50	56040.91	114632.38	968919.78	974850.52	1005930.73
17	48912.87	56079.14	114651.08	968942.32	974880.13	1005937.81
18	48938.24	56117.38	114669.79	968964.84	974909.74	1005944.90
19	48963.61	56155.64	114688.52	968987.34	974939.34	1005951.99
20	48988.97	56193.91	114707.26	969009.83	974968.92	1005959.09
21	49014.33	56232.19	114726.02	969032.31	974998.50	1005966.19
22	49039.68	56270.48	114744.79	969054.76	975028.06	1005973.30
23	49065.03	56308.79	114763.58	969077.21	975057.62	1005980.41
24	49090.37	56347.10	114782.39	969099.64	975087.16	1005987.52
25	49115.71	56385.43	114801.21	969122.05	975116.69	1005994.65
26	49141.05	56423.78	114820.05	969144.45	975146.22	1006001.77
27	49166.38	56462.13	114838.90	969166.83	975175.73	1006008.90
28	49191.71	56500.50	114857.77	969189.19	975205.23	1006016.04
29	49217.04	56538.88	114876.65	969211.55	975234.72	1006023.18
30	49242.36	56577.28	114895.55	969233.88	975264.20	1006030.32
31	49267.67	56615.68	114914.47	969256.20	975293.68	1006037.47
32	49292.98	56654.10	114933.40	969278.51	975323.14	1006044.63
33	49318.29	56692.53	114952.35	969300.80	975352.59	1006051.79
34	49343.59	56730.98	114971.32	969323.08	975382.03	1006058.95
35	49368.89	56769.44	114990.30	969345.34	975411.46	1006066.12
36	49394.19	56807.91	115009.30	969367.58	975440.88	1006073.29
37	49419.48	56846.39	115028.31	969389.81	975470.29	1006080.47
38	49444.77	56884.88	115047.34	969412.03	975499.69	1006087.66
39	49470.05	56923.39	115066.38	969434.23	975529.08	1006094.85
40	49495.33	56961.91	115085.44	969456.42	975558.46	1006102.04
41	49520.60	57000.45	115104.52	969478.59	975587.83	1006109.24
42	49545.87	57038.99	115123.61	969500.74	975617.18	1006116.44
43	49571.13	57077.55	115142.72	969522.88	975646.53	1006123.65
44	49596.39	57116.12	115161.85	969545.01	975675.87	1006130.86
45	49621.65	57154.71	115180.99	969567.12	975705.20	1006138.08
46	49646.90	57193.31	115200.15	969589.22	975734.52	1006145.30
47	49672.15	57231.92	115219.32	969611.30	975763.83	1006152.53
48	49697.40	57270.54	115238.51	969633.36	975793.13	1006159.76
49	49722.64	57309.18	115257.72	969655.41	975822.42	1006167.00
50	49747.87	57347.83	115276.94	969677.45	975851.70	1006174.24
51	49773.10	57386.49	115296.18	969699.47	975880.96	1006181.49
52	49798.33	57425.16	115315.43	969721.48	975910.22	1006188.74
53	49823.55	57463.85	115334.70	969743.47	975939.47	1006196.00
54	49848.77	57502.55	115353.99	969765.45	975968.71	1006203.26
55	49873.99	57541.26	115373.29	969787.41	975997.94	1006210.53
56	49899.20	57579.99	115392.61	969809.36	976027.16	1006217.80
57	49924.41	57618.73	115411.95	969831.29	976056.37	1006225.08
58	49949.61	57657.48	115431.30	969853.21	976085.57	1006232.36
59	49974.81	57696.25	115450.67	969875.11	976114.76	1006239.65
60	50000.00	57735.03	115470.05	969897.00	976143.94	1006246.94

°	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tagente	Tomologarith. pro Secante
60	87461.97	180404.78	206266.53	994181.93	1025624.80	1031442.88
59	87447.86	180281.08	206158.36	994174.92	1025595.61	1031420.09
58	87433.75	180157.51	206050.31	994167.91	1025565.24	1031397.33
57	87419.63	180034.08	205942.39	994160.90	1025535.47	1031374.58
56	87405.50	179910.77	205834.60	994153.88	1025505.72	1031351.84
55	87391.36	179787.59	205726.95	994146.85	1025475.97	1031329.12
54	87377.22	179664.54	205619.42	994139.82	1025446.24	1031306.41
53	87363.07	179541.62	205512.03	994132.79	1025416.51	1031283.72
52	87348.91	179418.83	205404.76	994125.75	1025386.80	1031261.05
51	87334.75	179296.16	205297.62	994118.71	1025357.10	1031238.39
50	87320.58	179173.62	205190.61	994111.66	1025327.41	1031215.75
49	87306.40	179051.21	205083.73	994104.61	1025297.73	1031193.12
48	87292.21	178928.93	204976.98	994097.55	1025268.06	1031170.51
47	87278.01	178806.78	204870.36	994090.48	1025238.40	1031147.91
46	87263.81	178684.75	204763.86	994083.42	1025208.75	1031125.33
45	87249.60	178562.85	204657.50	994076.34	1025179.11	1031102.77
44	87235.38	178441.07	204551.26	994069.27	1025149.48	1031080.22
43	87221.16	178319.43	204445.15	994062.19	1025119.87	1031057.68
42	87206.93	178197.90	204339.16	994055.10	1025090.26	1031035.16
41	87192.69	178076.51	204233.30	994048.01	1025060.66	1031012.66
40	87178.44	177955.24	204127.57	994040.91	1025031.08	1030990.17
39	47164.19	177834.09	204021.97	994033.81	1025001.50	1030967.69
38	87149.93	177713.07	203916.49	994026.70	1024971.94	1030945.24
37	87135.66	177592.18	203811.14	994019.59	1024942.38	1030922.79
36	87121.38	177471.41	203705.92	994012.48	1024912.84	1030900.36
35	87107.10	177350.76	203600.82	994005.35	1024883.31	1030877.95
34	87092.81	177230.24	203495.85	993998.23	1024853.78	1030855.55
33	87078.51	177109.85	203391.00	993991.10	1024824.27	1030833.17
32	87064.20	176989.58	203286.27	993983.96	1024794.77	1030810.81
31	87049.89	176869.43	203181.68	993976.82	1024765.28	1030788.45
30	87035.57	176749.40	203077.20	993969.68	1024735.80	1030766.12
29	87021.24	176629.50	202972.86	993962.53	1024706.32	1030743.80
28	87006.90	176509.72	202868.63	993955.37	1024676.86	1030721.49
27	86992.56	176390.07	202764.53	993948.21	1024647.41	1030699.20
26	86978.21	176270.53	202660.56	993941.05	1024617.97	1030676.92
25	86963.85	176151.12	202556.70	993933.88	1024588.54	1030654.66
24	86949.49	176031.83	202452.97	993926.71	1024559.12	1030632.42
23	86935.12	175912.67	202349.37	993919.53	1024529.71	1030610.19
22	86920.74	175793.62	202245.89	993912.34	1024500.31	1030587.97
21	86906.35	175674.70	202142.53	993905.15	1024470.92	1030565.77
20	86891.96	175555.90	202039.29	993897.96	1024441.54	1030543.58
19	86877.56	175437.22	201936.17	993890.76	1024412.17	1030521.41
18	86863.15	175318.66	201833.18	993883.56	1024382.82	1030499.26
17	86848.73	175200.23	201730.31	993876.35	1024353.47	1030477.12
16	86834.31	175081.91	201627.56	993869.14	1024324.13	1030454.99
15	86819.88	174963.71	201524.94	993861.92	1024294.80	1030432.88
14	86805.44	174845.64	201422.43	993854.70	1024265.48	1030410.78
13	86791.00	174727.68	201320.05	993847.47	1024236.17	1030388.70
12	86776.55	174609.84	201217.79	993840.24	1024206.87	1030366.64
11	86762.09	174492.13	201115.64	993833.00	1024177.58	1030344.59
10	86747.62	174374.53	201013.62	993825.76	1024148.30	1030322.55
9	86733.14	174257.05	200911.72	993818.51	1024119.04	1030300.53
8	86718.66	174139.69	200809.94	993811.26	1024089.78	1030278.52
7	86704.17	174022.45	200708.28	993804.00	1024060.53	1030256.53
6	86689.67	173905.33	200606.74	993796.74	1024031.29	1030234.55
5	86675.17	173788.33	200505.32	993789.47	1024002.06	1030212.59
4	86660.66	173671.44	200404.02	993782.20	1023972.84	1030190.64
3	86646.14	173554.68	200302.83	993774.92	1023943.63	1030168.71
2	86631.61	173438.03	200201.77	993767.64	1023914.43	1030146.79
1	86617.08	173321.49	200100.83	993760.35	1023885.24	1030124.89
0	86602.54	173205.08	200000.00	993753.06	1023856.06	1030103.00
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30	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0	50000.00	57735.03	115470.05	969897.00	976143.94	1006246.94
1	50025.19	57773.82	115489.45	969918.87	976173.11	1006254.23
2	50050.38	57812.62	115508.87	969940.73	976202.27	1006261.53
3	50075.56	57851.44	115528.30	969962.58	976231.42	1006268.84
4	50100.74	57890.27	115547.75	969984.41	976260.56	1006276.15
5	50125.91	57929.11	115567.22	970006.22	976289.69	1006283.47
6	50152.08	57967.97	115586.70	970028.02	976318.81	1006290.79
7	50176.24	58006.84	115606.20	970049.81	976347.92	1006298.11
8	50201.40	58045.73	115625.72	970071.58	976377.02	1006305.44
9	50226.55	58084.62	115645.25	970093.34	976406.12	1006312.78
10	50251.70	58123.53	115664.80	970115.08	976435.20	1006320.12
11	50276.85	58162.45	115684.36	970136.81	976464.27	1006327.46
12	50301.99	58201.39	115703.94	970158.52	976493.34	1006334.81
13	50327.13	58240.34	115723.54	970180.22	976522.39	1006342.17
14	50352.27	58279.30	115743.15	970201.90	976551.43	1006349.53
15	50377.40	58318.28	115762.78	970223.57	976580.47	1006356.89
16	50402.53	58357.27	115782.43	970245.23	976609.49	1006364.26
17	50427.65	58396.27	115802.09	970266.87	976638.51	1006371.64
18	50452.77	58435.28	115821.77	970288.49	976667.51	1006379.02
19	50477.88	58474.31	115841.47	970310.11	976696.51	1006386.40
20	50502.99	58513.35	115861.18	970331.70	976725.50	1006393.79
21	50528.09	58552.41	115880.91	970353.29	976754.48	1006401.19
22	50553.19	58591.48	115900.65	970374.86	976783.44	1006408.59
23	50578.28	58630.56	115920.41	970396.41	976812.40	1006415.99
24	50603.37	58669.65	115940.19	970417.95	976841.35	1006423.40
25	50628.46	58708.76	115959.99	970439.47	976870.29	1006430.82
26	50653.55	58747.88	115979.80	970460.99	976899.22	1006438.23
27	50678.63	58787.02	115999.63	970482.48	976928.14	1006445.66
28	50703.70	58826.17	116019.47	970503.97	976957.05	1006453.09
29	50728.77	58865.33	116039.33	970525.43	976985.96	1006460.52
30	50753.84	58904.50	116059.21	970546.89	977014.85	1006467.96
31	50778.90	58943.69	116079.11	970568.33	977043.73	1006475.41
32	50803.96	58982.89	116099.02	970589.75	977072.61	1006482.85
33	50829.01	59022.11	116118.95	970611.16	977101.47	1006490.31
34	50854.06	59061.34	116138.89	970632.56	977130.33	1006497.77
35	50879.10	59100.58	116158.85	970653.94	977159.17	1006505.23
36	50904.14	59139.83	116178.83	970675.31	977188.01	1006512.70
37	50929.18	59179.10	116198.82	970696.67	977216.84	1006520.17
38	50954.21	59218.39	116218.83	970718.01	977245.66	1006527.65
39	50979.24	59257.68	116238.86	970739.33	977274.47	1006535.14
40	51004.26	59296.99	116258.91	970760.64	977303.27	1006542.62
41	51029.28	59336.32	116278.97	970781.94	977332.06	1006550.12
42	51054.29	59375.66	116299.05	970803.23	977360.84	1006557.62
43	51079.30	59415.01	116319.14	970824.50	977389.61	1006565.12
44	51104.31	59454.37	116339.25	970845.75	977418.38	1006572.63
45	51129.31	59493.75	116359.38	970866.99	977447.13	1006580.14
46	51154.31	59533.14	116379.53	970888.22	977475.88	1006587.66
47	51179.30	59572.54	116399.69	970909.43	977504.62	1006595.18
48	51204.29	59611.96	116419.87	970930.63	977533.34	1006602.71
49	51229.27	59651.40	116440.07	970951.82	977562.06	1006610.24
50	51254.25	59690.84	116460.28	970972.99	977590.77	1006617.78
51	51279.22	59730.30	116480.51	970994.15	977619.47	1006625.33
52	51304.19	59769.78	116500.76	971015.29	977648.16	1006632.87
53	51329.15	59809.27	116521.02	971036.42	977676.85	1006640.43
54	51354.12	59848.77	116541.30	971057.53	977705.52	1006647.99
55	51379.08	59888.28	116561.60	971078.63	977734.18	1006655.55
56	51404.04	59927.81	116581.91	971099.72	977762.84	1006663.12
57	51428.99	59967.35	116602.24	971120.80	977791.49	1006670.69
58	51453.93	60006.91	116622.59	971141.86	977820.12	1006678.27
59	51478.87	60046.48	116642.96	971162.90	977848.75	1006685.85
60	51503.81	60086.06	116663.34	971183.93	977877.37	1006693.44

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60	86602.54	173205.08	200000.00	993753.06	1023856.06	1030103.00
59	86587.99	173088.78	199899.29	993745.77	1023826.89	1030081.13
58	86573.43	172972.60	199798.70	993738.47	1023797.73	1030059.27
57	86558.87	172856.54	199698.23	993731.16	1023768.58	1030037.42
56	86544.30	172740.60	199597.88	993723.85	1023739.44	1030015.59
55	86529.72	172624.77	199497.64	993716.53	1023710.31	1029993.78
54	86515.14	172509.05	199397.53	993709.21	1023681.19	1029971.98
53	86500.55	172393.45	199297.52	993701.89	1023652.08	1029950.19
52	86485.95	172277.97	199197.64	993694.56	1023622.98	1029928.42
51	86471.34	172162.61	199097.87	993687.22	1023593.88	1029906.66
50	86456.73	172047.36	198998.22	993679.88	1023564.80	1029884.92
49	86442.11	171932.22	198898.69	993672.54	1023535.73	1029863.19
48	86427.48	171817.20	198799.27	993665.19	1023506.66	1029841.48
47	86412.84	171702.30	198699.97	993657.83	1023477.61	1029819.78
46	86398.20	171587.51	198600.80	993650.47	1023448.57	1029798.10
45	86383.55	171472.83	198501.72	993643.11	1023419.53	1029776.43
44	86368.89	171358.27	198402.76	993635.74	1023390.51	1029754.77
43	86354.23	171243.82	198303.93	993628.36	1023361.49	1029733.13
42	86339.56	171129.49	198205.20	993620.98	1023332.49	1029711.51
41	86324.88	171015.27	198106.59	993613.60	1023303.49	1029689.89
40	86310.19	170901.16	198008.10	993606.21	1023274.50	1029668.30
39	86295.49	170787.17	197909.72	993598.81	1023245.52	1029646.71
38	86280.79	170673.29	197811.46	993591.41	1023216.56	1029625.14
37	86266.08	170559.53	197713.31	993584.01	1023187.60	1029603.59
36	86251.36	170445.87	197615.27	993576.60	1023158.65	1029582.05
35	86236.64	170332.33	197517.35	993569.18	1023129.71	1029560.53
34	86221.91	170218.90	197419.54	993561.77	1023100.78	1029539.01
33	86207.17	170105.59	197321.85	993554.34	1023071.86	1029517.52
32	86192.43	169992.38	197224.26	993546.91	1023042.95	1029496.03
31	86177.68	169879.29	197126.80	993539.48	1023014.04	1029474.57
30	86162.92	169766.31	197029.44	993532.04	1022985.15	1029453.11
29	86148.15	169653.44	196932.20	993524.59	1022956.27	1029431.67
28	86133.37	169540.69	196835.07	993517.15	1022927.39	1029410.25
27	86118.59	169428.04	196738.05	993509.69	1022898.53	1029388.84
26	86103.80	169315.50	196641.14	993502.23	1022869.67	1029367.44
25	86089.00	169203.08	196544.34	993494.77	1022840.83	1029346.06
24	86074.20	169090.77	196447.67	993487.30	1022811.99	1029324.69
23	86059.39	168978.56	196351.10	993479.83	1022783.16	1029303.33
22	86044.57	168866.47	196254.64	993472.35	1022754.34	1029281.99
21	86029.74	168754.49	196158.29	993464.86	1022725.53	1029260.67
20	86014.91	168642.61	196062.06	993457.38	1022696.73	1029239.36
19	86000.07	168530.85	195965.93	993449.88	1022667.94	1029218.06
18	85985.22	168419.19	195869.92	993442.38	1022639.16	1029196.77
17	85970.37	168307.65	195774.01	993434.88	1022610.39	1029175.50
16	85955.51	168196.21	195678.22	993427.37	1022581.62	1029154.25
15	85940.64	168084.89	195582.54	993419.86	1022552.87	1029133.01
14	85925.76	167973.67	195486.97	993412.34	1022524.12	1029111.78
13	85910.88	167862.56	195391.50	993404.82	1022495.38	1029090.57
12	85895.99	167751.56	195296.15	993397.29	1022466.66	1029069.37
11	85881.09	167640.67	195200.91	993389.76	1022437.94	1029048.18
10	85866.18	167529.88	195105.77	993382.22	1022409.23	1029027.01
9	85851.27	167419.21	195010.75	993374.67	1022380.53	1029005.85
8	85836.35	167308.64	194915.83	993367.13	1022351.84	1028984.71
7	85821.42	167198.18	194821.02	993359.57	1022323.15	1028963.58
6	85806.49	167087.82	194726.32	993352.01	1022294.48	1028942.47
5	85791.55	166977.58	194631.73	993344.45	1022265.82	1028921.37
4	85776.60	166867.44	194537.25	993336.88	1022237.16	1028900.28
3	85761.64	166757.41	194442.88	993329.31	1022208.51	1028879.20
2	85746.68	166647.48	194348.61	993321.73	1022179.88	1028858.14
1	85731.71	166537.66	194254.45	993314.15	1022151.25	1028837.10
0	85716.73	166427.95	194160.40	993306.56	1022122.63	1028816.07

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0	51503.81	60086.06	116663.34	971183.93	977877.37	1006693.44
1	51528.74	60125.66	116683.74	971204.95	977905.99	1006701.03
2	51553.67	60165.27	116704.16	971225.96	977934.59	1006708.63
3	51578.59	60204.90	116724.59	971246.95	977963.18	1006716.24
4	51603.51	60244.54	116745.04	971267.02	977991.77	1006723.84
5	51628.42	60284.19	116765.51	971288.89	978020.34	1006731.46
6	51653.33	60323.86	116785.99	971309.83	978048.91	1006739.08
7	51678.24	60363.54	116806.49	971330.77	978077.47	1006746.70
8	51703.14	60403.23	116827.01	971351.69	978106.02	1006754.33
9	51728.04	60442.94	116847.55	971372.60	978134.56	1006761.96
10	51752.93	60482.66	116868.10	971393.49	978163.09	1006769.60
11	51777.82	60522.40	116888.67	971414.37	978191.62	1006777.24
12	51802.70	60562.15	116909.26	971435.24	978220.13	1006784.89
13	51827.58	60601.92	116929.86	971456.09	978248.64	1006792.54
14	51852.46	60641.70	116950.48	971476.93	978277.13	1006800.20
15	51877.33	60681.49	116971.12	971497.76	978305.62	1006807.87
16	51902.19	60721.30	116991.78	971518.57	978334.10	1006815.53
17	51927.05	60761.12	117012.45	971539.37	978362.58	1006823.21
18	51951.91	60800.95	117033.14	971560.15	978391.04	1006830.89
19	51976.76	60840.80	117053.85	971580.92	978419.49	1006838.57
20	52001.61	60880.67	117074.57	971601.68	978447.94	1006846.26
21	52026.46	60920.54	117095.31	971622.43	978476.38	1006853.95
22	52051.30	60960.43	117116.07	971643.16	978504.81	1006861.65
23	52076.13	61000.34	117136.85	971663.87	978533.23	1006869.35
24	52100.96	61040.26	117157.64	971684.58	978561.64	1006877.06
25	52125.79	61080.19	117178.45	971705.26	978590.04	1006884.78
26	52150.61	61120.14	117199.28	971725.94	978618.44	1006892.50
27	52175.43	61160.11	117220.12	971746.60	978646.82	1006900.22
28	52200.24	61200.08	117240.99	971767.25	978675.20	1006907.95
29	52225.05	61240.07	117261.87	971787.89	978703.57	1006915.68
30	52249.86	61280.08	117282.77	971808.51	978731.93	1006923.42
31	52274.66	61320.10	117303.69	971829.12	978760.28	1006931.17
32	52299.45	61360.13	117324.62	971849.71	978788.63	1006938.91
33	52324.24	61400.18	117345.57	971870.30	978816.96	1006946.67
34	52349.03	61440.24	117366.54	971890.86	978845.29	1006954.43
35	52373.81	61480.32	117387.52	971911.42	978873.61	1006962.19
36	52398.59	61520.41	117408.52	971931.96	978901.92	1006969.96
37	52423.36	61560.52	117429.54	971952.49	978930.23	1006977.74
38	52448.13	61600.64	117450.58	971973.00	978958.52	1006985.52
39	52472.90	61640.77	117471.64	971993.50	978986.81	1006993.30
40	52497.66	61680.92	117492.71	972013.99	979015.08	1007001.09
41	52522.41	61721.08	117513.80	972034.47	979043.35	1007008.88
42	52547.16	61761.26	117534.91	972054.93	979071.61	1007016.68
43	52571.91	61801.45	117556.03	972075.38	979099.87	1007024.49
44	52596.65	61841.66	117577.17	972095.81	979128.11	1007032.30
45	52621.39	61881.88	117598.33	972116.23	979156.35	1007040.11
46	52646.12	61922.11	117619.51	972136.64	979184.58	1007047.93
47	52670.85	61962.36	117640.70	972157.04	979212.80	1007055.76
48	52695.58	62002.63	117661.91	972177.42	979241.01	1007063.59
49	52720.30	62042.91	117683.14	972197.79	979269.21	1007071.43
50	52745.02	62083.20	117704.39	972218.14	979297.41	1007079.27
51	52769.73	62123.51	117725.66	972238.48	979325.60	1007087.11
52	52794.44	62163.83	117746.94	972258.81	979353.78	1007094.96
53	52819.14	62204.17	117768.24	972279.13	979381.95	1007102.82
54	52843.84	62244.52	117789.56	972299.43	979410.11	1007110.68
55	52868.53	62284.88	117810.90	972319.72	979438.27	1007118.55
56	52893.22	62325.26	117832.25	972340.00	979466.41	1007126.42
57	52917.90	62365.66	117853.62	972360.26	979494.55	1007134.29
58	52942.58	62406.07	117875.01	972380.51	979522.68	1007142.17
59	52967.26	62446.50	117896.42	972400.75	979550.81	1007150.06
60	52991.93	62486.94	117917.84	972420.97	979578.92	1007157.95

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tăgente	Tomologarith. pro Secante
60	85716.73	166427.95	194160.40	993306.56	1022122.63	1028816.07
59	85701.74	166318.34	194066.46	993298.97	1022094.01	1028795.05
58	85686.75	166208.84	193972.62	993291.37	1022065.41	1028774.04
57	85671.75	166099.45	193878.89	993283.76	1022036.82	1028753.05
56	85656.74	165990.16	193785.27	993276.16	1022008.23	1028732.08
55	85641.73	165880.97	193691.76	993268.54	1021979.66	1028711.11
54	85626.71	165771.89	193598.35	993260.92	1021951.09	1028690.17
53	85611.68	165662.92	193505.05	993253.30	1021922.53	1028669.23
52	85596.64	165554.05	193411.85	993245.67	1021893.98	1028648.31
51	85581.60	165445.29	193318.76	993238.04	1021865.44	1028627.40
50	85566.55	165336.63	193225.78	993230.40	1021836.91	1028606.51
49	85551.49	165228.08	193132.90	993222.76	1021808.38	1028585.63
48	85536.42	165119.63	193040.13	993215.11	1021779.87	1028564.76
47	85521.35	165011.28	192947.46	993207.46	1021751.36	1028543.91
46	85506.27	164903.04	192854.90	993199.80	1021722.87	1028523.07
45	85491.18	164794.90	192762.44	993192.13	1021694.38	1028502.24
44	85476.09	164686.86	192670.09	993184.47	1021665.90	1028481.43
43	85460.99	164578.93	192577.84	993176.79	1021637.42	1028460.63
42	85445.88	164471.11	192485.70	993169.11	1021608.96	1028439.85
41	85430.76	164363.38	192393.66	993161.43	1021580.51	1028419.08
40	85415.64	164255.76	192301.73	993153.74	1021552.06	1028398.32
39	85400.51	164148.24	192209.90	993146.05	1021523.62	1028377.57
38	85385.37	164040.82	192118.17	993138.35	1021495.19	1028356.84
37	85370.23	163933.51	192026.55	993130.65	1021466.77	1028336.13
36	85355.08	163826.30	191935.03	993122.94	1021438.36	1028315.42
35	85339.92	163719.19	191843.62	993115.22	1021409.96	1028294.74
34	85324.75	163612.18	191752.30	993107.50	1021381.56	1028274.06
33	85309.58	163505.28	191661.09	993099.78	1021353.18	1028253.40
32	85294.40	163398.47	191569.99	993092.05	1021324.80	1028232.75
31	85279.21	163291.77	191478.99	993084.32	1021296.43	1028212.11
30	85264.02	163185.17	191388.09	993076.58	1021268.07	1028191.49
29	85248.81	163078.67	191297.29	993068.83	1021239.72	1028170.88
28	85233.60	162972.27	191206.59	993061.09	1021211.37	1028150.29
27	85218.38	162865.97	191116.00	993053.33	1021183.04	1028129.70
26	85203.16	162759.77	191025.51	993045.57	1021154.71	1028109.14
25	85187.93	162653.68	190935.12	993037.81	1021126.39	1028088.58
24	85172.69	162547.68	190844.83	993030.04	1021098.08	1028068.04
23	85157.44	162441.78	190754.64	993022.26	1021069.77	1028047.51
22	85142.19	162335.99	190664.56	993014.48	1021041.48	1028026.00
21	85126.93	162230.29	190574.57	993006.70	1021013.19	1028006.50
20	85111.66	162124.69	190484.69	992998.91	1020984.92	1027986.01
19	85096.39	162019.20	190394.91	992991.12	1020956.65	1027965.53
18	85081.11	161913.80	190305.22	992983.32	1020928.39	1027945.07
17	85065.82	161808.50	190215.64	992975.51	1020900.13	1027924.62
16	85050.52	161703.30	190126.16	992967.70	1020871.89	1027904.19
15	85035.22	161598.20	190036.78	992959.89	1020843.65	1027883.77
14	85019.91	161493.20	189947.50	992952.07	1020815.42	1027863.36
13	85004.59	161388.29	189858.32	992944.24	1020787.20	1027842.96
12	84989.27	161283.49	189769.24	992936.41	1020758.99	1027822.58
11	84973.94	161178.78	189680.26	992928.57	1020730.79	1027802.21
10	84958.60	161074.17	189591.38	992920.73	1020702.59	1027781.86
9	84943.25	160969.66	189502.59	992912.89	1020674.40	1027761.52
8	84927.90	160865.25	189413.91	992905.04	1020646.22	1027741.19
7	84912.54	160760.94	189325.32	992897.18	1020618.05	1027720.87
6	84897.17	160656.72	189236.84	992889.32	1020589.89	1027700.57
5	84881.79	160552.60	189148.45	992881.45	1020561.73	1027680.28
4	84866.41	160448.58	189060.16	992873.58	1020533.59	1027660.00
3	84851.02	160344.65	188971.97	992865.71	1020505.45	1027639.74
2	84835.62	160240.82	188883.88	992857.83	1020477.32	1027619.49
1	84820.22	160137.09	188795.89	992849.94	1020449.19	1027599.25
0	84804.81	160033.45	188707.99	992842.05	1020421.08	1027579.03

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0	52991.93	62486.94	117917.84	972420.38	979578.92	1007157.95
1	53016.59	62527.39	117939.28	972441.18	979607.03	1007165.85
2	53041.25	62567.86	117960.74	972461.40	979635.13	1007173.75
3	53065.91	62608.34	117982.22	972481.56	979663.22	1007181.66
4	53090.56	62648.84	118003.72	972501.74	979691.30	1007189.57
5	53115.21	62689.35	118025.23	972521.89	979719.38	1007197.49
6	53139.86	62729.88	118046.76	972542.04	979747.45	1007205.41
7	53164.50	62770.42	118068.31	972562.17	979775.51	1007213.34
8	53189.13	62810.98	118089.88	972582.29	979803.56	1007221.27
9	53213.76	62851.56	118111.47	972602.40	979831.60	1007229.21
10	53238.39	62892.15	118133.07	972622.49	979859.64	1007237.15
11	53263.01	62932.75	118154.69	972642.57	979887.67	1007245.10
12	53287.63	62973.36	118176.33	972662.64	979915.69	1007253.05
13	53312.24	63013.99	118197.99	972682.69	979943.70	1007261.01
14	53336.85	63054.64	118219.66	972702.73	979971.70	1007268.97
15	53361.45	63095.30	118241.35	972722.76	979999.70	1007276.94
16	53386.05	63135.98	118263.06	972742.78	980027.69	1007284.91
17	53410.64	63176.67	118284.7	972762.78	980055.67	1007292.89
18	53435.23	63217.38	118306.54	972782.77	980083.65	1007300.87
19	53459.82	63258.10	118328.30	972802.75	980111.61	1007308.86
20	53484.40	63298.83	118350.08	972822.71	980139.57	1007316.86
21	53508.98	63339.58	118371.88	972842.67	980167.52	1007324.86
22	53533.55	63380.35	118393.70	972862.60	980195.46	1007332.86
23	53558.12	63421.13	118415.54	972882.53	980223.40	1007340.87
24	53582.68	63461.93	118437.40	972902.44	980251.33	1007348.88
25	53607.24	63502.74	118459.27	972922.34	980279.25	1007356.90
26	53631.79	63543.57	118481.16	972942.23	980307.16	1007364.93
27	53656.34	63584.41	118503.07	972962.11	980335.06	1007372.96
28	53680.88	63625.27	118525.00	972981.97	980362.96	1007380.99
29	53705.42	63666.14	118546.94	973001.82	980390.85	1007389.04
30	53729.96	63707.03	118568.91	973021.65	980418.73	1007397.08
31	53754.49	63747.93	118590.89	973041.48	980446.61	1007405.13
32	53779.02	63788.85	118612.89	973061.29	980474.47	1007413.19
33	53803.54	63829.78	118634.91	973081.09	980502.33	1007421.25
34	53828.06	63870.73	118656.91	973100.87	980530.19	1007429.31
35	53852.57	63911.69	118679.90	973120.64	980558.03	1007437.39
36	53877.08	63952.67	118701.07	973140.40	980585.87	1007445.46
37	53901.58	63993.66	118723.16	973160.15	980613.70	1007453.54
38	53926.08	64034.67	118745.27	973179.89	980641.52	1007461.63
39	53950.58	64075.69	118767.40	973199.61	980669.33	1007469.72
40	53975.07	64116.73	118789.55	973219.32	980697.14	1007477.82
41	53999.55	64157.79	118811.71	973239.02	980724.94	1007485.92
42	54024.03	64198.86	118833.89	973258.70	980752.73	1007494.03
43	54048.51	64239.95	118856.09	973278.37	980780.52	1007502.14
44	54072.98	64281.05	118878.31	973298.03	980808.29	1007510.26
45	54097.45	64322.16	118900.55	973317.68	980836.06	1007518.39
46	54121.91	64363.29	118922.81	973337.31	980863.83	1007526.51
47	54146.37	64404.44	118945.08	973356.93	980891.58	1007534.65
48	54170.82	64445.60	118967.37	973376.54	980919.33	1007542.79
49	54195.27	64486.78	118989.68	973396.14	980947.07	1007550.93
50	54219.71	64527.97	119012.01	973415.72	980974.80	1007559.08
51	54244.15	64569.18	119034.36	973435.29	981002.53	1007567.23
52	54268.59	64610.41	119056.73	973454.85	981030.25	1007575.39
53	54293.02	64651.65	119079.12	973474.40	981057.96	1007583.56
54	54317.44	64692.90	119101.52	973493.93	981085.66	1007591.73
55	54341.86	64734.17	119123.94	973513.45	981113.36	1007599.90
56	54366.28	64775.46	119146.38	973532.96	981141.05	1007608.09
57	54390.69	64816.76	119168.84	973552.46	981168.73	1007616.27
58	54415.10	64858.08	119191.32	973571.95	981196.41	1007624.46
59	54439.50	64899.41	119213.82	973591.42	981224.08	1007632.66
60	54463.90	64940.76	119236.33	973610.88	981251.74	1007640.86

‡	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
60	84804.81	160033.45	188707.99	992842.05	1020421.08	1027579.03
59	84789.39	159929.91	188620.19	992834.15	1020392.97	1027558.82
58	84773.96	159826.47	188532.49	992826.25	1020364.87	1027538.62
57	89758.53	159723.12	188444.89	992818.34	1020336.78	1027518.44
56	84743.09	159619.87	188357.38	992810.43	1020308.70	1027498.26
55	84727.64	159516.72	188269.97	992802.51	1020280.62	1027478.11
54	84712.19	159413.66	188182.66	992794.59	1020252.55	1027457.96
53	84696.73	159310.70	188095.45	992786.66	1020224.49	1027437.83
52	84681.26	159207.83	188008.33	992778.73	1020196.44	1027417.71
51	84665.78	159105.05	187921.31	992770.79	1020168.40	1027397.60
50	84650.30	159002.38	187834.38	992762.85	1020140.36	1027377.51
49	84634.81	158899.79	187747.55	992754.90	1020112.33	1027357.43
48	84619.31	158797.30	187660.82	992746.95	1020084.31	1027337.36
47	84603.81	158694.91	187574.18	992738.99	1020056.30	1027317.31
46	84588.30	158592.61	187487.64	992731.03	1020028.30	1027297.27
45	84572.78	158490.41	187401.20	992723.06	1020000 30	1027277.24
44	84557.25	158388.30	187314.85	992715.09	1019972.31	1027257.22
43	84541.72	158286.28	187228.59	992707.11	1019944.33	1027237.22
42	84526.18	158184.36	187142.43	992699.13	1019916.35	1027217.23
41	84510.63	158082.53	187056.37	992691.14	1019888.39	1027197.25
40	84495.08	157980.79	186970.40	992683.14	1019860.43	1027177.29
39	84479.52	157879 15	186884.53	992675.14	1019832.48	1027157.33
38	84463.95	157777.60	186798.75	992667.14	1019804.54	1027137.40
37	84448.37	157676.15	186713.06	992659.13	1019776.60	1027117.47
36	84432.79	157574.79	186627.47	992651 12	1019748.67	1027097.56
35	84417.20	157473.52	186541.97	992643.10	1019720.75	1027077.66
34	84401.60	157372 34	186456.57	992635 07	1019692.84	1027057.77
33	84386.00	157271.26	186371.26	992627.04	1019664.94	1027037.90
32	84370.39	157170.26	186286.05	992619.01	1019637.04	1027018.03
31	84354.77	157069.36	186200.93	992610.96	1019609.15	1026998.18
30	84339.14	156968.56	186115.90	992602.92	1019581.27	1026978.35
29	84323.51	156867.84	186030.96	992594 87	1019553.39	1026958.52
28	84307.87	156767.22	185946 12	992586.81	1019525.53	1026938.71
27	84292.22	156666.69	185861.38	992578.75	1019497.67	1026918.91
26	84276.57	156566.25	185776.72	992570.69	1019469 81	1026899.13
25	84260.91	156465.90	185692.16	992562.61	1019441.97	1026879.36
24	84245.24	15636,.04	185607.69	992554.54	1019414.13	1026859.60
23	84229.56	156265.48	185523.31	992546.46	1019386.30	1026839.85
22	84213.88	156165.40	185439.03	992538.37	1019358.48	1026820.11
21	84198.19	156065.42	185354.83	992530.28	1019330.67	1026800.39
20	84182.49	155965.52	185270.73	992522.18	1019302.86	1026780.68
19	84166.79	155865.72	185186.72	992514.08	1019275.06	1026760.98
18	84151.08	155766.01	185102.81	992505.97	1019247.27	1026741.30
17	84135.36	155666.39	185018 98	992497.86	1019219.48	1026721.63
16	84119.63	155566.85	184935.25	992489 74	1019191.71	1026701.97
15	84103.90	155467.41	184851.61	992481.61	1019163.94	1026682.32
14	84088.16	155368.06	184768.05	992473.49	1019136.17	1026662.69
13	84072.41	155268 80	184684.59	992465.35	1019108.42	1026643.07
12	84056.66	155169.63	184601.23	992457.21	1019080.67	1026623.46
11	84040.90	155070.54	184517.95	992449.07	1019052 93	1026603.86
10	84025.13	154971.55	184434.76	992440.92	1019025.20	1026584.28
9	84009.35	154872.64	184351.66	992432.77	1018997.47	1026564.71
8	83993.57	154773.83	184268.66	992424 61	1018969.75	1026545.15
7	83977.78	154675.10	184185.74	992416.44	1018942.04	1026525.60
6	83961.98	154576.46	184102.92	992408.27	1018914.34	1026506.07
5	83946.18	154477.92	184020.18	992400.10	1018886.64	1026486.55
4	83930.37	154379.46	183937.53	992391.91	1018858.95	1026467.04
3	83914.55	154281.08	183854.98	992383.73	1018831.27	1026447.54
2	83898.73	154182.80	183772.51	992375.54	1018803.59	1026428.05
1	83882.90	154084.60	183690.13	992367.34	1018775.92	1026408.58
0	83867.06	153986.50	183607.84	992359.14	1018748.26	1026389.12

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0	54463.90	64940.76	119236.33	973610.88	981251.74	1007640.86
1	54488.30	64982.12	119258.86	973630.32	981279.39	1007649.07
2	54512.69	65023.50	119281.41	973649.76	981307.04	1007657.28
3	54537.07	65064.90	119303.98	973669.18	981334.68	1007665.50
4	54561.45	65106.31	119326.57	973688.59	981362.31	1007673.72
5	54585.83	65147.74	119349.18	973707.99	981389.94	1007681.95
6	54610.20	65189.18	119371.81	973727.37	981417.55	1007690.18
7	54634.56	65230.64	119394.46	973746.75	981445.16	1007698.42
8	54658.92	65272.11	119417.12	973766.11	981472.77	1007706.66
9	54683.28	65313.60	119439.80	973785.46	981500.36	1007714.91
10	54707.63	65355.11	119462.50	973804.79	981527.95	1007723.16
11	54731.98	65396.63	119485.22	973824.12	981555.54	1007731.42
12	54756.32	65438.17	119507.96	973843.43	981583.11	1007739.69
13	54780.66	65479.72	119530.72	973862.73	981610.68	1007747.95
14	54804.99	65521.29	119553.50	973882.01	981638.24	1007756.23
15	54829.32	65562.87	119576.30	973901.29	981665.80	1007764.51
16	54853.65	65604.47	119599.11	973920.55	981693.35	1007772.79
17	54877.97	65646.09	119621.94	973939.80	981720.89	1007781.09
18	54902.28	65687.72	119644.79	973959.04	981748.42	1007789.38
19	54926.59	65729.37	119667.66	973978.27	981775.95	1007797.68
20	54950.90	65771.03	119690.55	973997.48	981803.47	1007805.99
21	54975.20	65812.71	119713.46	974016.68	981830.98	1007814.30
22	54999.50	65854.41	119736.39	974035.87	981858.49	1007822.62
23	55023.79	65896.12	119759.34	974055.05	981885.99	1007830.94
24	55048.08	65937.85	119782.31	974074.21	981913.48	1007839.27
25	55072.36	65979.59	119805.29	974093.37	981940.96	1007847.60
26	55096.64	66021.35	119828.29	974112.51	981968.44	1007855.94
27	55120.91	66063.13	119851.31	974131.64	981995.92	1007864.28
28	55145.18	66104.92	119874.35	974150.75	982023.38	1007872.63
29	55169.44	66146.73	119897.41	974169.86	982050.84	1007880.98
30	55193.70	66188.56	119920.49	974188.95	982078.29	1007889.34
31	55217.95	66230.40	119943.59	974208.03	982105.74	1007897.71
32	55242.20	66272.26	119966.71	974227.10	982133.17	1007906.07
33	55266.45	66314.13	119989.85	974246.16	982160.60	1007914.45
34	55290.69	66356.02	120013.01	974265.20	982188.03	1007922.83
35	55314.92	66397.92	120036.19	974284.23	982215.45	1007931.22
36	55339.15	66439.84	120059.38	974303.25	982242.86	1007939.61
37	55363.38	66481.78	120082.59	974322.26	982270.26	1007948.00
38	55387.60	66523.73	120105.82	974341.26	982297.66	1007956.40
39	55411.82	66565.70	120129.07	974360.24	982325.05	1007964.81
40	55436.03	66607.69	120152.34	974379.21	982352.44	1007973.22
41	55460.24	66649.69	120175.63	974398.17	982379.81	1007981.64
42	55484.44	66691.71	120198.94	974417.12	982407.19	1007990.06
43	55508.64	66733.75	120222.27	974436.06	982434.55	1007998.49
44	55532.83	66775.80	120245.62	974454.98	982461.91	1008006.92
45	55557.02	66817.87	120268.99	974473.90	982489.26	1008015.36
46	55581.21	66859.95	120292.37	974492.80	982516.60	1008023.81
47	55605.39	66902.05	120315.77	974511.69	982543.94	1008032.25
48	55629.56	66944.17	120339.19	974530.56	982571.27	1008040.71
49	55653.73	66986.30	120362.64	974549.43	982598.60	1008049.17
50	55677.90	67028.45	120386.10	974568.28	982625.92	1008057.63
51	55702.06	67070.62	120409.58	974587.12	982653.23	1008066.10
52	55726.21	67112.80	120433.08	974605.95	982680.53	1008074.58
53	55750.36	67155.00	120456.60	974624.77	982707.83	1008083.06
54	55774.51	67197.21	120480.14	974643.58	982735.13	1008091.55
55	55798.65	67239.44	120503.70	974662.37	982762.41	1008100.04
56	55822.79	67281.69	120527.28	974681.15	982789.69	1008108.54
57	55846.92	67323.96	120550.88	974699.92	982816.96	1008117.04
58	55871.05	67366.24	120574.50	974718.68	982844.23	1008125.55
59	55895.17	67408.54	120598.14	974737.43	982871.49	1008134.06
60	55919.29	67450.85	120621.80	974756.17	982898.74	1008142.58

′	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
60	83867.06	153986.50	183607.84	992359.14	1018748.26	1026389.12
59	83851.21	153888.48	183525.64	992350.93	1018720.61	1026369.68
58	83835.36	153790.55	183443.53	992342.72	1018692.96	1026350.24
57	83819.50	153692.70	183361.51	992334.50	1018665.32	1026330.82
56	83803.63	153594.94	183279.58	992326.28	1018637.69	1026311.41
55	83787.75	153497.27	183197.74	992318.05	1018610.07	1026292.01
54	83771.87	153399.69	183115.99	992309.82	1018582.45	1026272.63
53	83755.98	153302.20	183034.32	992301.58	1018554.84	1026253.25
52	83740.03	153204.79	182952.74	992293.34	1018527.23	1026233.89
51	83724.13	153107.47	182871.25	992285.09	1018499.64	1026214.54
50	83708.27	153010.23	182789.85	992276.84	1018472.05	1026195.21
49	83692.35	152913.08	182708.54	992268.58	1018444.48	1026175.88
48	83676.43	152816.02	182627.31	992260 32	1018416.89	1026156.57
47	83660.50	152719.04	182546.17	992252.05	1018389.32	1026137.27
46	83644.56	152622.15	182465.12	992243.77	1018361.76	1026117.99
45	83628.61	152525.35	182384.16	992235.49	1018334 20	1026098.71
44	83612.66	152428.63	182303.28	992227.21	1018306.65	1026079.45
43	83596.70	152332.00	182222.40	992218.91	1018279.11	1026060.20
42	835 0.73	152235.45	182141.79	992210.62	1018251.58	1026040.96
41	83564.76	152138.99	182061.18	992202.32	1018224.05	1026021.73
40	83548.78	152042.61	181980.65	992194.01	1018196.53	1026002.52
39	83532.79	151946 32	181900.21	992185.70	1018169.02	1025983.32
38	835 6.80	151850.12	181819.85	992177.38	1018141.51	1025964.13
37	83500.80	151754.00	181739.58	992169.06	1018114.01	1025944.95
36	83484.79	151657.96	181659.40	992160 73	1018086.52	1025925.79
35	83468.77	151562.01	181579 30	992152.40	1018059.04	1025906.63
34	83452.75	151466.14	181499.29	992144.06	1018031.56	1025887.49
33	83436.72	151370.36	181419.37	992135.72	1018004.08	1025868.36
32	83420.68	151274.66	181339.53	992127.37	1017976.62	1025849.25
31	83404.63	151179.05	181259.77	992119.02	1017949.16	1025830.14
30	83388.58	151083.52	181180.10	992110.66	1017921.71	1025811.05
29	83372.52	150988.07	181100.52	992102.29	1017894.26	1025791.97
28	83356.45	150892.71	181021.02	992093.93	1017866.83	1025772.90
27	83340.38	150797.43	180941.61	992085.55	1017839.40	1025753.84
26	83324.30	150702.24	180862.28	992077.17	1017811.97	1025734.80
25	83308.21	150607.13	180783.04	992068.78	1017784.55	1025715.77
24	83292.12	150512.10	180703.88	992060.39	1017757.14	1025696.75
23	83276.02	150417.16	180624.81	992052.00	1017729.74	1025677.74
22	83259.91	150322.30	180545.82	992043.60	1017702.34	1025658.74
21	83243.80	150227.52	180466.91	992035.19	1017674.95	1025639.76
20	83227.68	150132.82	180388.09	992026.78	1017647.56	1025620.79
19	83211.55	150038.20	180309.35	992018.36	1017620.19	1025601.83
18	83195.41	149943.67	180230.70	992009.94	1017592.81	1025582.88
17	83179.27	149849.22	180152.13	992001.51	1017565.45	1025563.94
16	83163.12	149754.86	180073.65	991993.08	1017538.09	1025545.02
15	83146.96	149660.58	179995.25	991984.64	1017510.74	1025526.10
14	83130.79	149565.38	179916.93	991976.19	1017483.40	1025507.20
13	83114.62	149472.26	179838.69	991967.75	1017456.06	1025488.31
12	83098.44	149378.22	179760.54	991959.29	1017428.73	1025469.44
11	83082.26	149284.26	179682.47	991950.83	1017401.40	1025450.57
10	83066.07	149190.38	179604.48	991942.37	1017374.08	1025431.72
9	83049.87	149096.59	179526.58	991933.90	1017346.77	1025412.88
8	83033.66	149002.88	179448.76	991925.42	1017319.47	1025394.05
7	83017.45	148909.25	179371.02	991916.94	1017292.17	1025375.23
6	83001.23	148815.70	179293.37	991908.45	1017264.87	1025356.42
5	82985.00	148722.23	179215.80	991899.96	1017237.59	1025337.63
4	82968.76	148628.84	179138.31	991891.46	1017210.31	1025318.85
3	82952.52	148535.53	179060.90	991882.96	1017183.04	1025300.08
2	82936.27	148442.30	178983.58	991874.45	1017155.77	1025281.32
1	82920.02	148349.16	178906.33	991865.94	1017128.51	1025262.57
0	82903.76	148256.10	178829.16	991857.42	1017101.26	1025243.83

′	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0	55919.29	67450.85	120621.80	974756.17	982898.74	1008142.58
1	55943.40	67493.18	120645.48	974774.89	982925.99	1008151.10
2	55967.51	67535.53	120669.18	974793.60	982953.23	1008159.63
3	55991.61	67577.90	120692.89	974812.30	982980.47	1008168.17
4	56015.71	67620.28	120716.62	974830.99	983007.69	1008176.71
5	56039.81	67662.68	120740.37	974849.67	983034.92	1008185.25
6	56063.90	67705.09	120764.14	974868.33	983062.13	1008193.80
7	56087.98	67747.52	120787.93	974886.98	983089.34	1008202.36
8	56112.06	67789.97	120811.75	974905.62	983116.54	1008210.92
9	56136.14	67832.44	120835.95	974924.25	983143.74	1008219.49
10	56160.21	67874.92	120859.44	974942.87	983170.93	1008228.06
11	56184.28	67917.42	120883.31	974961.48	983198.11	1008236.64
12	56208.34	67959.93	120907.20	974980.07	983225.29	1008245.22
13	56232.39	68002.46	120931.12	974998.66	983252.46	1008253.81
14	56256.44	68045.01	120955.05	975017.23	983279.63	1008262.40
15	56280.49	68087.58	120979.00	975035.79	983306.79	1008271.00
16	56304.53	68130.16	121002.97	975054.34	983333.94	1008279.60
17	56328.57	68172.76	121026.96	975072.87	983361.09	1008288.21
18	56352.60	68215.38	121050.97	975091.40	983388.23	1008296.83
19	56376.63	68258.01	121075.00	975109.91	983415.36	1008305.45
20	56400.65	68300.66	121099.05	975128.42	983442.49	1008314.07
21	56424.67	68343.33	121123.12	975146.91	983469.61	1008322.70
22	56448.69	68386.01	121147.21	975165.38	983496.73	1008331.34
23	56472.70	68428.71	121171.32	975183.85	983523.84	1008339.98
24	56496.70	68471.43	121195.45	975202.31	983550.94	1008348.63
25	56520.70	68514.17	121219.60	975220.75	983578.04	1008357.28
26	56544.69	68556.92	121243.77	975239.19	983605.13	1008365.94
27	56568.68	68599.69	121267.96	975257.61	983632.21	1008374.61
28	56592.67	68642.47	121292.17	975276.02	983659.29	1008383.27
29	56616.65	68685.27	121316.40	975294.42	983686.36	1008391.95
30	56640.62	68728.10	121340.64	975312.80	983713.43	1008400.63
31	56664.59	68770.94	121364.91	975331.18	983740.49	1008409.31
32	56688.56	68813.79	121389.20	975349.54	983767.55	1008418.00
33	56712.52	68856.66	121413.51	975367.90	983794.60	1008426.70
34	56736.48	68899.55	121437.83	975386.24	983821.64	1008435.40
35	56760.43	68942.46	121462.18	975404.57	983848.67	1008444.11
36	56784.37	68985.38	121486.55	975422.88	983875.71	1008452.82
37	56808.31	69028.32	121510.94	975441.19	983902.73	1008461.54
38	56832.25	69071.28	121535.35	975459.49	983929.75	1008470.26
39	56856.18	69114.25	121559.78	975477.77	983956.76	1008478.99
40	56880.11	69157.24	121584.23	975496.04	983983.77	1008487.72
41	56904.03	69200.25	121608.70	975514.31	984010.77	1008496.46
42	56927.95	69243.28	121633.19	975532.56	984037.76	1008505.21
43	56951.86	69286.33	121657.70	975550.80	984064.75	1008513.96
44	56975.77	69329.39	121682.23	975569.02	984091.74	1008522.71
45	56999.68	69372.47	121706.78	975587.24	984118.71	1008531.48
46	57023.58	69415.57	121731.35	975605.44	984145.69	1008540.24
47	57047.47	69458.68	121755.94	975623.64	984172.65	1008549.01
48	57071.36	69510.81	121780.55	975641.82	984199.61	1008557.79
49	57095.24	69544.96	121805.18	975659.99	984226.57	1008566.58
50	57119.12	69588.13	121829.83	975678.15	984253.51	1008575.36
51	57142.99	69631.31	121854.50	975696.30	984280.46	1008584.16
52	57166.86	69674.51	121879.19	975714.44	984307.39	1008592.96
53	57190.73	69717.73	121903.90	975732.56	984334.32	1008601.76
54	57214.59	69760.97	121928.64	975750.68	984361.25	1008610.57
55	57238.44	69804.22	121953.39	975768.78	984388.17	1008619.39
56	57262.29	69847.49	121978.16	975786.87	984415.08	1008628.21
57	57286.14	69890.78	122002.96	975804.95	984441.99	1008637.04
58	57309.98	69934.09	122027.77	975823.02	984468.89	1008645.87
59	57333.81	69977.41	122052.60	975841.08	984495.79	1008654.71
60	57357.64	70020.75	122077.46	975859.13	984522.68	1008663.55

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
60	82903.76	148256.10	178829.16	991857.42	1017101.26	1025243.83
59	82887.49	148163.11	178752.08	991848.90	1017074.01	1025225.11
58	82871.21	148070.21	178675.08	991840.37	1017046.77	1025206.40
57	82854.93	147977.38	178598.17	991831.83	1017019.53	1025187.70
56	82838.64	147884.63	178521.33	991823.29	1016992.31	1025169.01
55	82822.34	147791.97	178444.57	991814.75	1016965.08	1025150.33
54	82806.03	147699.38	178367.90	991806.20	1016937.87	1025131.67
53	82789.72	147606.88	178291.31	991797.64	1016910.66	1025113.02
52	82773.40	147514.45	178214.79	991789.08	1016883.46	1025094.38
51	82757.07	147422.10	178138.36	991780.51	1016856.26	1025075.75
50	82740.74	147329.83	178062.01	991771.94	1016829.07	1025057.13
49	82724.40	147237.64	177985.74	991763.36	1016801.89	1025038.52
48	82708.05	147145.53	177909.55	991754.78	1016774.71	1025019.93
47	82691.70	147053.50	177833.43	991746.19	1016747.54	1025001.34
46	82675.34	146961.55	177757.40	991737.60	1016720.37	1024982.77
45	82658.97	146869.67	177681.45	991729.00	1016693.21	1024964.21
44	82642.60	146777.87	177605.58	991720.40	1016666.06	1024945.66
43	82626.22	146686.16	177529.79	991711.79	1016638.91	1024927.13
42	82609.83	146594.52	177454.08	991703.17	1016611.77	1024908.60
41	82593.43	146502.96	177378.45	991694.55	1016584.64	1024890.09
40	82577.03	146411.47	177302.90	991685.93	1016557.51	1024871.58
39	82560.62	146320.07	177227.43	991677.30	1016530.39	1024853.09
38	82544.20	146228.74	177152.04	991668.66	1016503.37	1024834.62
37	82527.78	146137.49	177076.73	991660.02	1016476.16	1024816.15
36	82511.35	146046.32	177001.49	991651.37	1016449.06	1024797.69
35	82494.91	145955.22	176926.33	991642.72	1016421.96	1024779.25
34	82478.47	145864.20	176851.25	991634.06	1016394.87	1024760.81
33	82462.02	145773.26	176776.25	991625.39	1016367.79	1024742.39
32	82445.56	145682.40	176701.33	991616.73	1016340.71	1024723.98
31	82429.09	145591.61	176626.49	991608.05	1016313.64	1024705.58
30	82412.62	145500.90	176551.73	991599.37	1016286.57	1024687.20
29	82396.14	145410.27	176477.04	991590.69	1016259.51	1024668.82
28	82379.65	145319.71	176402.43	991582.00	1016232.45	1024650.46
27	82363.16	145229.23	176327.91	991573.30	1016205.40	1024632.10
26	82346.66	145138.83	176253.45	991564.60	1016178.36	1024613.76
25	82330.15	145048.50	176179.08	991555.89	1016151.33	1024595.43
24	82313.64	144958.25	176104.78	991547.18	1016124.29	1024577.12
23	82297.12	144868.08	176030.56	991538.46	1016097.27	1024558.81
22	82280.59	144777.98	175956.42	991529.74	1016070.25	1024540.51
21	82264.05	144687.96	175882.36	991521.01	1016043.24	1024522.23
20	82247.51	144598.01	175808.37	991512.28	1016016.23	1024503.96
19	82230.96	144508.14	175734.46	991503.54	1015989.23	1024485.69
18	82214.40	144418.34	175660.63	991494.79	1015962.24	1024467.44
17	82197.84	144328.62	175586.87	991486.04	1015935.25	1024449.20
16	82181.27	144238.97	175513.19	991477.29	1015908.26	1024430.98
15	82164.69	144149.40	175439.59	991468.52	1015881.29	1024412.76
14	82148.11	144059.91	175366.07	991459.76	1015854.31	1024394.56
13	82131.52	143970.49	175292.62	991450.99	1015827.35	1024376.36
12	82114.92	143881.14	175219.24	991442.21	1015800.39	1024358.18
11	82098.31	143791.87	175145.94	991433.42	1015773.43	1024340.01
10	82081.70	143702.68	175072.73	991424.64	1015746.49	1024321.85
9	82065.08	143613.56	174999.58	991415.84	1015719.54	1024303.70
8	82048.46	143524.51	174926.51	991407.04	1015692.61	1024285.56
7	82081.83	143435.54	174853.52	991398.24	1015665.68	1024267.44
6	82015.19	143346.64	174780.60	991389.43	1015638.75	1024249.32
5	81998.54	143257.81	174707.76	991380.61	1015611.83	1024231.22
4	81981.89	143169.06	174634.99	991371.79	1015584.92	1024213.13
3	81965.23	143080.39	174562.30	991362.96	1015558.01	1024195.05
2	81948.56	142991.78	174489.69	991354.13	1015531.11	1024176.98
1	81931.89	142903.26	174417.15	991345.30	1015504.21	1024158.92
0	81915.21	142814.80	174344.68	991336.45	1015477.32	1024140.87

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0	57357.64	70020.75	122077.46	975859. 13	984522.68	1008663.55
1	57381.47	70064. 11	122102.33	975877. 17	984549. 56	1008672.40
2	57405. 29	70107. 49	122127. 23	975895. 19	984576. 44	1008681. 25
3	57429. 11	70150. 89	122152. 15	975913. 21	984603. 32	1008690. 11
4	57452. 92	70194. 30	122177. 08	975931. 21	984630. 18	1008698. 98
5	57476. 73	70237. 73	122202. 04	975949. 20	084657. 05	1008707. 85
6	57500. 52	70281. 18	122227. 02	975967. 18	984683. 90	1008716. 72
7	57524. 32	70324. 65	122252. 02	975985. 15	9847 0. 75	1008725. 60
8	5754 . 11	70368. 13	122277. 03	976003. 11	984737. 60	1008734. 49
9	57571. 90	70411. 63	122302. 07	976021. 06	974764. 44	1008743. 38
10	57595. 68	70455. 15	122327. 13	976038. 99	984791. 27	1008752. 28
11	57619. 46	70498. 69	122352. 21	976056. 92	984818. 10	1008761. 18
12	57643. 23	70542. 24	122377. 32	976074. 83	984844. 92	1008770. 09
13	57667. 00	70585. 81	122402. 44	976092. 74	984871. 74	1008779. 01
14	57690. 76	70629. 40	122427. 58	976110. 63	084898. 55	1008787. 93
15	57714. 52	70673. 01	122452. 74	976128. 51	984925. 36	1008796. 85
16	57738. 27	70716. 64	122477. 93	976146. 38	984952. 16	1008805. 78
17	57762. 02	70760. 30	122503. 13	976164. 24	984978. 96	1008814. 72
18	57785. 76	70803. 05	122528. 37	976182. 08	985005. 75	1008823. 66
19	57809. 50	70847. 63	122553. 61	976199. 92	985032. 53	1008832. 61
20	57833. 23	70891. 33	122578. 87	976217. 75	085059. 31	1008841. 57
21	57856. 96	70935. 05	122604. 16	976235. 56	985086. 08	1008850. 53
22	57880. 68	70978. 78	122629. 47	976253. 37	985112. 85	1008859. 49
23	57904. 40	71022. 53	122654. 80	976271. 16	985139. 61	1008868. 45
24	57928. 12	71066. 30	122680. 15	976288. 94	985166. 37	1008877. 43
25	57951. 83	71110. 09	122705 52	976306. 71	985192. 12	1008886. 41
26	57975. 53	71153. 90	122730. 01	976324. 47	985210. 87	1008895. 40
27	57999. 23	71197. 73	122756. 32	976342. 22	985246. 61	1008904. 30
28	58022. 92	71241. 57	122781. 76	976359. 96	985273. 35	1008913 3
29	58046. 61	71285. 43	122807. 21	976377. 69	985300. 08	1008922. 3
30	58070. 30	71329. 31	122832. 69	976395. 40	985326. 80	1008931. 40
31	58093. 98	71373. 21	122858. 19	976413. 11	985353. 52	1008940. 41
32	58117. 65	71417. 13	122883. 71	976430. 80	985380. 23	1008949. 43
33	58141. 32	71461. 06	122909. 25	976448. 49	985406. 04	1008958. 45
34	58164. 98	71505. 01	122934. 81	976466. 16	985433. 65	1008967. 46
35	58188. 64	71548. 98	122960. 39	976483. 82	985460. 34	1008976. 52
36	58212 30	71592. 97	122985. 00	976501. 47	985487. 04	1008985. 56
37	58235. 95	71636. 98	123011. 61	976519. 11	985513. 72	1008994. 61
38	58259. 59	71681 01	123037. 25	976536. 74	985540. 41	1009003. 66
39	58283. 23	71725. 05	123062. 02	976554. 36	985567. 08	1009012. 7
40	58306. 87	71760. 11	123088. 61	976571. 97	985593. 76	1009021. 7
41	58330. 50	71813. 19	123114. 22	976589. 57	985620. 42	1009030. 85
42	58354. 12	71857. 29	123140. 05	976607. 15	985647. 08	1009039. 93
43	58377. 74	71901. 41	123165. 80	976624. 73	985673. 74	1009049. 01
44	58401. 36	71945. 55	123191. 57	976642. 29	985700. 39	1009058. 10
45	58424. 97	71989. 70	123217. 36	976659. 85	985727. 04	1009067. 19
46	58448. 57	72033. 87	123243. 17	976677. 39	985753. 68	1009076. 29
47	58472. 17	72078. 06	123260. 00	976694. 02	985780. 31	1009085. 30
48	58495. 77	72122. 27	123294. 86	976712. 44	985806. 94	1009094. 50
49	58519. 36	72166. 50	123320. 74	976729. 96	985833. 57	1009103. 61
50	58542. 94	72210. 75	123346. 64	976747. 46	985860. 19	1009112. 73
51	58566. 52	72255. 02	123372. 56	976764. 95	985886. 80	1009121. 86
52	58590 10	72290. 31	123398. 50	976782. 42	985913. 41	1009130. 90
53	58613. 67	72343. 61	123424. 46	976799. 89	085940. 02	1009140. 12
54	58637. 24	72387. 93	123450. 44	976817. 35	985966. 61	1009140. 27
55	58660. 80	72432. 27	123476. 45	976834. 80	985993. 21	1009158. 41
56	58684. 35	72476. 63	123502. 48	976852. 23	986019. 80	1009167. 57
57	58707. 90	72521. 01	123528. 52	976869. 66	986046. 38	1009176. 73
58	58731. 45	72565. 41	123554. 59	976887. 07	986072. 96	1009185. 80
59	58754. 99	72609. 83	123580. 68	976904. 48	986099. 54	1009195 06
60	58778. 53	72654. 26	123606. 80	976921. 87	986126. 10	1009204. 24

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tagente	Tomologarith. pro Secante
60	81915.21	142814.80	174344.68	991336.45	1015477.32	1024140.87
59	81898.52	142726.42	174272.29	991327.60	1015450.44	1024122.83
58	81881.82	142638.11	174199.97	991318.75	1015423.56	1024104.81
57	81865.12	142549.87	174127.73	991309.89	1015396.68	1024086.79
56	81848.41	142461.71	174055.56	991301.02	1015369.82	1024068.79
55	81831.69	142373.62	173983.47	991292.15	1015342.95	1024050.80
54	81814.97	142285.61	173911.45	991283.28	1015316.10	1024032.82
53	81798.24	142197.66	173839.51	991274.40	1015289.25	1024014.85
52	81781.50	142109.79	173767.64	991265.51	1015262.40	1023996.89
51	81764.76	142022.00	173695.85	991256.62	1015235.56	1023978.94
50	81748.01	141934.27	173624.13	991247.72	1015208.73	1023961.01
49	81731.25	141846.62	173552.47	991238.82	1015181.90	1023943.08
48	81714.49	141759.04	173480.90	991229.91	1015155.08	1023925.17
47	81697.72	141671.53	173409.41	991220.99	1015128.26	1023907.26
46	81680.94	141584.09	173337.98	991212.07	1015101.45	1023889.37
45	81664.15	141496.73	173266.63	991203.15	1015074.64	1023871.49
44	81647.36	141409.43	173195.35	991194.22	1015047.84	1023853.62
43	81630.56	141322.21	173124.14	991185.28	1015021.04	1023835.76
42	81613.76	141235.06	173053.01	991176.34	1014994.25	1023817.92
41	81596.95	141147.99	172981.95	991167.39	1014967.47	1023800.08
40	81580.13	141060.98	172910.96	991158.44	1014940.69	1023782.25
39	81563.30	140974.05	172840.05	991149.48	1014913.92	1023764.44
38	81546.47	140887.18	172769.21	991140.51	1014887.15	1023746.63
37	81529.63	140800.39	172698.44	991131.55	1014860.39	1023728.84
36	81512.78	140713.67	172627.74	991122.57	1014833.63	1023711.06
35	81495.93	140627.02	172557.12	991113.59	1014806.88	1023693.29
34	81479.06	140540.44	172486.57	991104.60	1014780.13	1023675.53
33	81462.19	140453.93	172416.09	991095.61	1014753.39	1023657.78
32	81445.32	140367.49	172345.68	991086.61	1014726.65	1023640.04
31	81428.44	140281.13	172275.34	991077.61	1014699.92	1023622.31
30	81411.55	140194.83	172205.08	991068.60	1014673.20	1023604.60
29	81394.65	140108.60	172134.89	991059.59	1014646.48	1023586.89
28	81377.75	140022.45	172064.77	991050.57	1014619.77	1023569.20
27	81360.84	139936.36	171994.72	991041.55	1014593.06	1023551.51
26	81343.93	139850.34	171924.75	991032.51	1014566.35	1023533.84
25	81327.01	139764.40	171854.84	991023.48	1014539.66	1023516.18
24	81310.08	139678.52	171785.01	991014.44	1014512.96	1023498.53
23	81293.14	139592.72	171715.25	991005.39	1014486.28	1023480.89
22	81276.20	139506.98	171645.56	990996.34	1014459.59	1023463.26
21	81259.25	139421.31	171575.94	990987.28	1014432.92	1023445.64
20	81242.29	139335.71	171506.39	990978.21	1014406.24	1023428.03
19	81225.32	139250.18	171436.91	990969.15	1014379.58	1023410.43
18	81208.35	139164.73	171367.50	990960.07	1014352.92	1023392.85
17	81191.37	139079.34	171298.17	990950.99	1014326.26	1023375.27
16	81174.39	138994.01	171228.90	990941.90	1014299.61	1023357.71
15	81157.40	138908.76	171159.70	990932.81	1014272.96	1023340.15
14	81140.40	138823.58	171090.58	990923.71	1014246.32	1023322.61
13	81123.39	138738.46	171021.52	990914.61	1014219.69	1023305.08
12	81106.38	138653.42	170952.54	990905.50	1014193.06	1023287.56
11	81089.36	138568.44	170883.62	990896.39	1014166.43	1023270.04
10	81072.33	138483.53	170814.78	990887.27	1014139.81	1023252.54
9	81055.30	138398.69	170746.00	990878.14	1014113.20	1023235.06
8	81038.26	138313.92	170677.30	990869.01	1014086.59	1023217.58
7	81021.21	138229.22	170608.66	990859.88	1014059.98	1023200.11
6	81004.16	138144.58	170540.10	990850.73	1014033.39	1023182.65
5	80987.10	138060.01	170471.60	990841.59	1014006.79	1023165.20
4	80970.03	137975.51	170403.18	990832.43	1013980.20	1023147.77
3	80952.96	137891.08	170334.82	990823.27	1013953.62	1023130.34
2	80935.88	137806.72	170266.53	990814.11	1013927.04	1023112.93
1	80918.79	137722.42	170198.31	990804.94	1013900.46	1023095.52
0	80901.70	137638.19	170130.16	990795.76	1013873.90	1023078.13

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0	58778.53	72654.26	123606.80	976921.87	986126.10	1009204.24
1	58802.06	72698.71	123632.94	976939.25	986152.67	1009213.42
2	58825.58	72743.18	123659.09	976956.62	986179.23	1009222.60
3	58849.10	72787.67	123685.26	976973.98	986205.78	1009231.80
4	58872.62	72832.18	123711.48	976991.34	986232.33	1009240.99
5	58896.13	72876.71	123737.68	977008.68	986258.87	1009250.20
6	58919.64	72921.26	123763.93	977026.01	986285.41	1009259.41
7	58943.14	72965.82	123790.19	977043.32	986311.95	1009268.62
8	58966.63	73010.40	123816.47	977060.63	986338.48	1009277.84
9	58990.12	73055.01	123842.78	977077.93	976365.00	1009287.07
10	59013.61	73099.63	123869.11	977095.22	986391.52	1009296.30
11	59037.09	73144.27	123895.46	977112.49	986418 03	1009305.54
12	59060.57	73188.94	123921.83	977129.76	986444.54	1009314.78
13	59084.04	73233.62	123948.22	977147.02	986471.05	1009324.03
14	59107.50	73278.31	123974.64	977164.26	986497.55	1009333.29
15	59130.96	73323.03	124001.08	977181.50	986524.04	1009342.55
16	59154.42	733 7.77	124027.54	977198.72	986550.53	1009351.81
17	59177.87	73412.53	124054.02	977215.93	986577.02	1009361.08
18	59201.32	73457.30	124080.52	977233.14	986603.50	1009370.36
19	59224.76	73502.10	124107.04	977250.33	986629.97	1009379.64
20	59248.19	73546.91	124133.59	977267.51	986656.44	1009388.93
21	59271.62	73591.74	124160.16	977284.68	986682.91	1009398.23
22	59295.05	73636.60	124186.75	977301.85	986709.37	1009407.53
23	59318.47	73681.47	124213.36	977319.00	986735.83	1009416.83
24	59341.89	73726.36	124239.99	977336.14	986762.28	1009426.14
25	59365.30	73771.27	124266.65	977353.27	986788.73	1009435.46
26	59388.71	73816.20	124293.33	977370.39	986815.17	1009444.78
27	59412.11	73861.15	124320.03	977387.49	986841.60	1009454.11
28	59435.50	73906.11	124346.75	977404.59	986868.04	1009463.44
29	59458.89	73951.10	124373.49	977421.68	986894.46	1009472.77
30	59482.28	73996.11	124400.26	977438.76	986920.89	1009482.13
31	59505.66	74041.14	124427.05	977455.83	986947.31	1009491.48
32	59529.03	74086.18	124453.86	977472.88	986973 72	1009500.84
33	59552.40	74131.24	124480.69	977489.93	987000.13	1009510.20
34	59575.77	74176.33	124507.54	977506.97	987026.53	1009519.57
35	59599.13	74221.43	124534.42	977523.99	987052.93	1009528.94
36	59622.49	74266.55	124561.31	977541.01	987079.33	1009538.32
37	59645.84	74311.70	124588.23	977558.01	987105.72	1009547.70
38	59669.18	74356.86	124615.18	977575.01	987132.10	1009557.09
39	59692.52	74402.04	124642.14	977591.99	987158.48	1009566.49
40	59715.86	74447.24	124669.13	977608.97	987184.86	1009575.88
41	59739.19	74492.46	124696.14	977625.93	987211 23	1009585.30
42	59762.51	74537.70	124723.17	977642.89	987237.60	1009594.71
43	59785.83	74582.96	124750.22	977659.83	987263.96	1009604.13
44	59809.15	74628.24	124777.30	977676.76	987290.32	1009613.56
45	59832.46	74673.54	124804.40	977693.69	987316.68	1009622.99
46	59855.76	74718.86	124831.52	977710.60	987343.02	1009632.43
47	59879.06	74764.20	124858.66	977727.50	987369.37	1009641.87
48	59902.36	74809.56	124885.83	977744.39	987395.71	1009651.32
49	59925.65	74854.94	124913.02	977761.28	987422.04	1009660.77
50	59948.93	74900.33	124940.23	977778.15	987448.38	1009670.23
51	59972.21	74945.75	124967.46	977795.01	987474.70	1009679.69
52	59995.49	74991.19	124994.71	977811.86	987501.02	1009689.16
53	60018.76	75036.65	125021.99	977828.70	987527.34	1009698.64
54	60042.02	75082.12	125049.29	977845.53	987553.65	1009708.12
55	60065.28	75127.62	125076.61	977862.35	987579.96	1009717.61
56	60088.53	75173.14	125103.96	977879.16	987606.27	1009727.11
57	60111.78	75218.69	125131.33	977895.96	987632.57	1009736.61
58	60135.03	75264.23	125158.72	977912.75	987658.86	1009746.11
59	60158.27	75309.81	125186.13	977929.53	987685.15	1009755.62
60	60181.50	75355.40	125213.57	977946.30	987711.44	1009765.14

°	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
60	80901.70	137638.19	170130.16	990795.76	1013873.90	1023078.13
59	80884.60	137554.03	170062.08	990786.58	1013847.33	1023060.75
58	80867.49	137469.94	169994.07	990777.40	1013820.77	1023043.38
57	80850.37	137385.91	169926.12	990768.20	1013794.22	1023026.02
56	80833.25	137301.95	169898.25	990759.01	1013767.67	1023008.66
55	80816.12	137218.05	169790.44	990749.80	1013741.13	1022991.32
54	80798.99	137134.23	169722.71	990740.59	1013714.59	1022973.99
53	80781.85	137050.47	169655.04	990731.38	1013688.05	1022956.68
52	80764.70	136966.78	169587.43	990722.16	1013661.52	1022939.37
51	80747.54	136883.15	169519.90	990712.93	1013635.00	1022922.07
50	80730.38	136799.59	169452.44	990703.70	1013608.48	1022904.78
49	80713.21	136716.10	169385.04	990694.46	1013581.97	1022887.51
48	80696.03	136632.67	169317.71	990685.22	1013555.46	1022870.24
47	80678.85	136549.31	169250.45	990675.97	1013528.95	1022852.98
46	80661.66	136466.02	169183.26	990666.71	1013502.45	1022835.74
45	80644.46	136382.79	169116.13	990657.45	1013475.96	1022818.50
44	80627.26	136299.63	169049.07	990648.19	1013449.47	1022801.28
43	80610.05	136216.53	168982.08	990638.92	1013422.98	1022784.07
42	80592.83	136133.50	168915.16	990629.64	1013396.50	1022766.86
41	80575.60	136050.54	168848.30	990620.36	1013370.03	1022749.67
40	80558.37	135967.64	168781.51	990611.07	1013343.56	1022732.49
39	80541.13	135884.81	168714.79	990601.77	1013317.09	1022715.32
38	80523.89	135802.04	168648.14	990592.47	1013290.63	1022698.15
37	80506.64	135719.34	168581.55	990583.17	1013264.17	1022681.00
36	80489.38	135636.70	168515.03	990573.86	1013237.72	1022663.86
35	80472.11	135554.13	168448.57	990564.54	1013211.27	1022646.73
34	80454.84	135471.62	168382.18	990555.22	1013184.83	1022629.61
33	80437.56	135389.18	168315.86	990545.89	1013158.40	1022612.51
32	80420.28	135306.80	168249.61	990536.56	1013131.96	1022595.41
31	80402.99	135224.49	168183.42	990527.22	1013105.54	1022578.32
30	80385.69	135142.24	168117.30	990517.87	1013079.11	1022561.24
29	80368.38	135060.06	168051.24	990508.52	1013052.69	1022544.17
28	80351.07	134977.94	167985.25	990499.16	1013026.28	1022527.12
27	80333.75	134895.89	167919.33	990489.80	1012999.87	1022510.07
26	80316.42	134813.90	167853.47	990480.43	1012973.47	1022493.03
25	80299.09	134731.97	167787.68	990471.06	1012947.07	1022476.01
24	80281.75	134650.11	167721.95	990461.68	1012920.67	1022458.99
23	80264.40	134568.32	167656.29	990452.30	1012894.28	1022441.99
22	80247.05	134486.58	167590.70	990442.91	1012867.90	1022424.99
21	80229.69	134404.92	167525.17	990433.51	1012841.52	1022408.01
20	80212.32	134323.31	167459.70	990424.11	1012815.14	1022391.03
19	80194.94	134241.77	167394.30	990414.70	1012788.77	1022374.07
18	80177.56	134160.29	167328.97	990405.29	1012762.40	1022357.11
17	80160.17	134078.88	167263.70	990395.87	1012736.04	1022340.17
16	80142.78	133997.53	167198.50	990386.44	1012709.68	1022323.24
15	80125.38	133916.24	167133.36	990377.01	1012683.32	1022306.31
14	80107.97	133835.02	167068.28	990367.57	1012656.98	1022289.40
13	80090.56	133753.86	167003.28	990358.13	1012630.63	1022272.50
12	80073.14	133672.76	166938.33	990348.68	1012604.29	1022255.61
11	80055.71	133591.72	166873.45	990339.23	1012577.96	1022238.72
10	80038.27	133510.75	166808.64	990329.77	1012551.62	1022221.85
9	80020.83	133429.84	166743.89	990320.31	1012525.30	1022204.99
8	80003.38	133349.00	166679.20	990310.84	1012498.98	1022188.14
7	79985.93	133268.22	166614.58	990301.36	1012472.66	1022171.30
6	79968.47	133187.49	166550.02	990291.88	1012446.35	1022154.47
5	79951.00	133106.84	166485.52	990282.39	1012420.04	1022137.65
4	79933.52	133026.24	166421.09	990272.89	1012393.73	1022120.84
3	79916.04	132949.71	166356.73	990263.39	1012367.43	1022104.04
2	79898.55	132865.24	166292.43	990253.89	1012341.14	1022087.25
1	79881.05	132784.83	166228.19	990244.38	1012314.85	1022070.47
0	79863.55	132704.48	166164.01	990234.86	1012288.56	1022053.70

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0	60181.50	75355.40	125213.57	977946.30	987711.44	1009765.14
1	60204.73	75401.02	125241.02	977963.06	987737.72	1009774.66
2	60227.95	75446.66	125268.50	977979.81	987764.00	1009784.19
3	60251.17	75492.32	125296.01	977996.55	987790.27	1009793.72
4	60274.39	75537.99	125323.53	978013.28	987816.54	1009803.26
5	60297.60	75583.69	125351.08	978030.00	987842.81	1009812.81
6	60320.80	75629.41	125378.65	978046.71	987869.07	1009822.36
7	60344.00	75675.14	125406.25	978063.41	987895.33	1009831.92
8	60367.19	75720.90	125433.87	978080.10	987921.58	1009841.48
9	60390.38	75766.68	125461.51	978096.77	987947.82	1009851.05
10	60413.56	75812.48	125489.17	978113.44	987974.07	1009860.62
11	60436.74	75858.29	125516.85	978130.10	988000.31	1009870.20
12	60459.91	75904.13	125544.56	978146.75	988026.54	1009879.79
13	60483.08	75949.99	125572.29	978163.39	988052.77	1009889.38
14	60506.24	75995.87	125600.05	978180.02	988079.00	1009898.98
15	60529.40	76041.77	125627.82	978196.64	988105.22	1009908.58
16	60552.55	76087.69	125655.62	978213.24	988131.44	1009918.19
17	60575.70	76133.63	125683.45	978229.84	988157.65	1009927.81
18	60598.84	76179.59	125711.29	978246.43	988183.86	1009937.43
19	60621.98	76225.57	125739.16	978263.01	988210.07	1009947.06
20	60645.11	76271.57	125767.05	978279.58	988236.27	1009956.69
21	60668.23	76317.59	125794.97	978296.14	988262.46	1009966.33
22	60691.35	76363.63	125822.91	978312.68	988288.66	1009975.97
23	60714.47	76409.69	125850.87	978329.22	988314.84	1009985.62
24	60737.58	76455.77	125878.85	978345.75	988341.03	1009995.28
25	60760.69	76501.88	125906.86	978362.27	988367.21	1010004.94
26	60783.79	76548.00	125934.89	978378.78	988393.38	1010014.61
27	60806.89	76594.14	125962.94	978395.28	988419.56	1010024.28
28	60829.98	76640.31	125991.02	978411.77	988445.72	1010033.96
29	60853.06	76686.49	126019.12	978428.24	988471.89	1010043.64
30	60876.14	76732.70	126047.24	978444.71	988498.05	1010053.33
31	60899.22	76778.93	126075.39	978461.17	988524.20	1010063.03
32	60922.29	76825.17	126103.56	978477.62	988550.35	1010072.73
33	60945.35	76871.44	126131.75	978494.06	988576.50	1010082.44
34	60968.41	76917.73	126159.97	978510.49	988602.64	1010092.16
35	60991.47	76964.04	126188.20	978526.91	988628.78	1010101.88
36	61014.52	77010.37	126216.46	978543.32	988654.92	1010111.60
37	61037.56	77056.72	126244.75	978559.72	988681.05	1010121.33
38	61060.60	77103.09	126273.06	978576.11	988707.18	1010131.07
39	61083.63	77149.48	126301.40	978592.49	988733.30	1010140.81
40	61106.66	77195.89	126329.75	978608.86	988759.42	1010150.56
41	61129.68	77242.33	126358.13	978625.22	988785.54	1010160.32
42	61152.70	77288.79	126386.53	978641.57	988811.65	1010170.08
43	61175.72	77335.26	126414.96	978657.91	988837.75	1010179.85
44	61198.73	77381.75	126443.41	978674.24	988863.86	1010189.62
45	61221.73	77428.27	126471.88	978690.56	988889.96	1010199.40
46	61244.73	77474.81	126500.38	978706.87	988916.05	1010209.18
47	61267.72	77521.37	126528.90	978723.17	988942.14	1010218.97
48	61290.71	77567.95	126557.45	978739.46	988968.23	1010228.77
49	61313.69	77614.55	126586.01	978755.74	988994.32	1010238.57
50	61336.66	77661.17	126614.60	978772.02	989020.40	1010248.38
51	61359.63	77707.82	126643.22	978788.28	989046.47	1010258.19
52	61382.60	77754.48	126671.86	978804.53	989072.54	1010268.01
53	61405.56	77801.17	126700.52	978820.77	989098.61	1010277.84
54	61428.52	77847.88	126729.21	978837.01	989124.68	1010287.67
55	61451.47	77894.60	126757.92	978853.23	989150.74	1010297.51
56	61474.42	77941.35	126786.65	978869.44	989176.79	1010307.35
57	61497.36	77988.12	126815.41	978885.65	989202.85	1010317.20
58	61520.29	78034.92	126844.19	978901.84	989228.90	1010327.06
59	61543.22	78081.73	126872.99	978918.02	989254.94	1010336.92
60	61566.15	78128.56	126901.82	978934.20	989280.98	1010346.79

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60	79863.55	132704.48	166164.01	990234.86	10122288.56	10220053.70
59	79846.04	132624.20	166099.90	990225.34	10122262.28	10220036.94
58	79828.52	132543.97	166035.85	990215.81	10122236.00	10220020.19
57	79811.00	132463.81	165971.87	990206.28	10122209.73	10220003.45
56	79793.47	132383.71	165907.95	990196.74	10122183.46	10219986.72
55	79775.93	132303.68	165844.00	990187.19	10122157.19	10219970.00
54	79758.39	132223.70	165780.30	990177.64	10122130.93	10219953.29
53	79740.84	132143.79	165716.57	990168.08	10122104.67	10219936.59
52	79723.28	132063.93	165652.90	990158.52	10122078.42	10219919.90
51	79705.72	131984.14	165589.29	990148.95	10122052.18	10219903.23
50	79688.15	131904.41	165525.75	990139.38	10122025.93	10219886.56
49	79670.57	131824.74	165462.27	990129.80	10121999.69	10219869.90
48	79652.99	131745.13	165398.85	990120.21	10121973.46	10219853.25
47	79635.40	131665.59	165335.50	990110.62	10121947.23	10219836.61
46	79617.80	131586.10	165272.21	990101.02	10121921.00	10219819.98
45	79600.20	131506.68	165208.98	990091.42	10121894.78	10219803.36
44	79582.59	131427.31	165145.81	990081.81	10121868.56	10219786.76
43	79564.97	131348.01	165082.70	990072.19	10121842.35	10219770.16
42	79547.35	131268.76	165019.66	990062.57	10121816.14	10219753.57
41	79529.72	131189.58	164956.68	990052.94	10121789.93	10219736.99
40	79512.08	131110.46	164893.76	990043.31	10121763.73	10219720.42
39	79494.43	131031.40	164830.90	990033.67	10121737.54	10219703.86
38	79476.78	130952.39	164768.11	990024.03	10121711.34	10219687.32
37	79459.12	130873.45	164705.37	990014.38	10121685.16	10219670.78
36	79441.46	130794.57	164642.70	990004.72	10121658.97	10219654.25
35	79423.79	130715.75	164580.09	989995.06	10121632.79	10219637.73
34	79406.11	130636.99	164517.54	989985.39	10121606.62	10219621.22
33	79388.43	130558.28	164455.06	989975.72	10121580.44	10219604.72
32	79370.74	130479.64	164392.63	989966.04	10121554.28	10219588.23
31	79353.04	130401.06	164330.27	989956.36	10121528.11	10219571.76
30	79335.33	130322.54	164267.96	989946.67	10121501.95	10219555.29
29	79317.62	130244.07	164205.72	989936.97	10121475.80	10219538.83
28	79299.90	130165.67	164143.54	989927.27	10121449.65	10219522.38
27	79282.18	130087.32	164081.42	989917.56	10121423.50	10219505.94
26	79264.45	130009.04	164019.36	989907.84	10121397.36	10219489.51
25	79246.71	129930.81	163957.36	989898.12	10121371.22	10219473.09
24	79228.96	129852.65	163895.42	989888.40	10121345.08	10219456.68
23	79211.21	129774.54	163833.55	989878.67	10121318.95	10219440.28
22	79193.45	129696.49	163771.73	989868.93	10121292.82	10219423.89
21	79175.69	129618.50	163709.97	989859.19	10121266.70	10219407.51
20	79157.92	129540.57	163648.28	989849.44	10121240.58	10219391.14
19	79140.14	129462.69	163586.64	989839.68	10121214.46	10219374.78
18	79122.35	129384.88	163525.07	989829.92	10121188.35	10219358.43
17	79104.56	129307.12	163463.55	989820.15	10121162.25	10219342.09
16	79086.76	129229.43	163402.10	989810.38	10121136.14	10219325.76
15	79068.96	129151.79	163340.70	989800.60	10121110.04	10219309.44
14	79051.15	129074.21	163279.37	989790.82	10121083.95	10219293.13
13	79033.33	128996.69	163218.09	989781.03	10121057.86	10219276.83
12	79015.50	128919.22	163156.88	989771.23	10121031.77	10219260.54
11	78997.67	128841.82	163095.72	989761.43	10121005.68	10219244.26
10	78979.83	128764.47	163034.62	989751.62	10120979.60	10219227.98
9	78961.98	128687.18	162973.59	989741.81	10120953.53	10219211.72
8	78944.13	128609.95	162912.61	989731.99	10120927.46	10219195.47
7	78926.27	128532.77	162851.69	989722.16	10120901.39	10219179.23
6	78908.41	128455.66	162790.83	989712.33	10120875.32	10219162.99
5	78890.54	128378.60	162730.03	989702.49	10120849.26	10219146.77
4	78872.66	128301.60	162669.29	989692.65	10120823.21	10219130.56
3	78854.77	128224.66	162608.61	989682.80	10120797.15	10219114.35
2	78836.88	128147.76	162547.99	989672.94	10120771.10	10219098.16
1	78818.98	128070.93	162487.43	989663.08	10120745.06	10219081.98
0	78801.07	127994.16	162426.92	989653.21	10120719.02	10219065.80

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0	61566.15	78128.56	126901.82	978934.20	989280.98	1010346.79
1	61589.07	78175.42	126930.67	978950.36	989307.02	1010356.66
2	61611.98	78222.29	126959.55	978966.52	989333.06	1010366.54
3	61634.89	78269.19	126988.45	978982.66	989359.09	1010376.42
4	61657.79	78316.11	127017.37	978998.80	989385.11	1010386.31
5	61680.69	78363.05	127046.32	979014.93	989411.14	1010396.21
6	61703.59	78410.02	127075.29	979031.04	989437.15	1010406.11
7	61726.48	78457.00	127104.29	979047.15	989463.17	1010416.02
8	61749.36	78504.00	127133.31	979063.25	989489.18	1010425.94
9	61772.24	78551.03	127162.35	979079.33	989515.19	1010435.86
10	61795.11	78598.78	127191.42	979095.41	989541.19	1010445.78
11	61817.98	78645.15	127220.51	979111.48	989567.19	1010455.72
12	61840.84	78692.24	127249.63	979127.54	989593.19	1010465.65
13	61863.70	78739.35	127278.77	979143.59	989619.18	1010475.60
14	61886.55	78786.49	127307.94	979159.63	989645.17	1010485.55
15	61909.40	78833.64	127337.12	979175.66	989671.16	1010495.50
16	61932.24	78880.82	127366.34	979191.68	989697.14	1010505.47
17	61055.07	78928.02	127395.57	979207.69	989723.12	1010515.43
18	61977.90	78975.24	127424.84	979223.69	989749.10	1010525.41
19	62000.73	79022.48	127454.12	979239.68	989775.07	1010535.39
20	62023.55	79069.75	127483.43	979255.66	989801.04	1010545.37
21	62046.36	79117.03	127512.76	979271.63	989827.00	1010555.37
22	62069.17	79164.34	127542.12	979287.60	989852.96	1010565.36
23	62091.98	79211.67	127571.50	979303.55	989878.92	1010575.37
24	62114.78	79259.02	127600.91	979319.49	989904.87	1010585.38
25	62137.57	79306.40	127630.34	979335.43	989930.82	1010595.39
26	62160.36	79353.79	127659.80	979351.35	989956.77	1010605.42
27	62183.14	79401.21	127689.28	979367.27	989982.71	1010615.44
28	62205.92	79448.65	127718.78	979383.17	990008.65	1010625.48
29	62228.69	79496.11	127748.31	979399.07	990034.59	1010635.52
30	62251.46	79543.59	127777.87	979414.96	990060.52	1010645.56
31	62274.22	79591.10	127807.45	979430.83	990086.45	1010655.61
32	62296.98	79638.62	127837.05	979446.70	990112.37	1010665.67
33	62319.73	79686.17	127866.67	979462.56	990138.30	1010675.74
34	62342.48	79733.74	127896.32	979478.41	990164.22	1010685.81
35	62365.22	79781.34	127926.00	979494.25	990190.13	1010695.88
36	62387.96	79828.95	127955.70	979510.08	990216.04	1010705.96
37	62410.69	79876.59	127985.43	979525.90	990241.95	1010716.05
38	62433.42	79924.25	128015.18	979541.71	990267.86	1010726.15
39	62456.14	79971.93	128044.95	979557.51	990293.76	1010736.25
40	62478.85	80019.63	128074.75	979573.30	990319.66	1010746.35
41	62501.56	80067.36	128104.57	979589.09	990345.55	1010756.46
42	62524.26	80115.11	128134.42	979604.86	990371.44	1010766.58
43	62546.96	80162.88	128164.30	979620.62	990397.33	1010776.71
44	62569.66	80210.67	128194.20	979636.38	990423.21	1010786.84
45	62592.35	80258.48	128224.12	979652.12	990449.10	1010796.97
46	62615.03	80306.32	128254.07	979667.86	990474.97	1010807.11
47	62637.71	80354.18	128284.04	979683.59	990500.85	1010817.26
48	62660.38	80402.06	128314.04	979699.30	990526.72	1010827.42
49	62683.05	80449.97	128344.06	979715.01	990552.59	1010837.58
50	62705.71	80497.90	128374.11	979730.71	990578.45	1010847.74
51	62728.37	80545.85	128404.18	979746.40	990604.31	1010857.92
52	62751.02	80593.82	128434.28	979762.08	990630.17	1010868.09
53	62773.66	80641.81	128464.40	979777.75	990656.03	1010878.28
54	62796.30	80689.83	128494.55	979793.41	990681.88	1010888.47
55	62818.94	80737.87	128524.72	979809.06	990707.73	1010898.67
56	62841.57	80785.93	128554.92	979824.70	990733.57	1010908.87
57	62864.20	80834.01	128585.14	979840.34	990759.41	1010919.08
58	62886.82	80882.12	128615.39	979855.96	990785.25	1010929.29
59	62909.43	80930.25	128645.66	979871.58	990811.09	1010939.51
60	62932.04	80978.40	128675.96	979887.18	990836.92	1010949.74

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60	78801.07	127994.16	162426.92	989653.21	1010719.02	1021065.80
59	78783.16	127917.45	162366.48	989643.34	1010692.98	1021049.64
58	78765.24	127840.79	162306.09	989633.46	1010666.94	1021033.48
57	78747.32	127764.19	162245.76	989623.58	1010640.91	1021017.34
56	78729.39	127687.64	162185.49	989613.69	1010614.89	1021001.20
55	78711.45	127611.16	162125.28	989603.79	1010588.86	1020985.07
54	78693.50	127534.73	162065.13	989593.89	1010562.85	1020968.96
53	78675.55	127458.36	162005.04	989583.98	1010536.83	1020952.85
52	78657.59	127382.04	161945.00	989574.06	1010510.82	1020936.75
51	78639.62	127305.78	161885.02	989564.14	1010484.81	1020920.67
50	78621.65	127229.57	161825.10	989554.22	1010458.81	1020904.59
49	78603.67	127153.42	161765.24	989544.29	1010432.81	1020888.52
48	78585.69	127077.33	161705.44	989534.35	1010406.81	1020872.46
47	78567.70	127001.30	161645.69	989524.40	1010380.82	1020856.41
46	78549.70	126925.32	161586.00	989514.45	1010354.83	1020840.37
45	78531.69	126849.39	161526.37	989504.50	1010328.84	1020824.34
44	78513.68	126773.53	161466.80	989494.53	1010302.86	1020808.32
43	78495.66	126697.72	161407.28	959484.57	1010276.88	1020792.31
42	78477.64	126621.96	161347.83	989474.59	1010250.90	1020776.31
41	78459.61	126546.26	161288.43	989464.61	1010224.93	1020760.32
40	78441.57	126470.62	161229.08	989454.63	1010198.96	1020744.34
39	78423.52	126395.03	161169.80	989444.63	1010173.00	1020728.37
38	78405.47	126319.50	161110.57	989434.64	1010147.04	1020712.40
37	78387.41	126244.02	161051.40	989424.63	1010121.08	1020696.45
36	78369.35	126168.60	160992.28	989414.62	1010095.13	1020680.51
35	78351.28	126093.23	160933.23	989404.61	1010069.18	1020664.57
34	78333.20	126017.92	160874.23	989394.58	1010043.23	1020648.65
33	78315.11	125942.67	160815.28	989384.56	1010017.29	1020632.73
32	78297.02	125867.47	160756.40	989374.52	1009991.35	1020616.83
31	78278.92	125792.32	160697.57	989364.48	1009965.41	1020600.93
30	78260.82	125717.23	160638.79	989354.44	1009939.48	1020585.04
29	78242.71	125642.19	160580.08	989344.39	1009913.55	1020569.17
28	78224.59	125567.21	160521.42	989334.33	1009887.63	1020553.30
27	78206.46	125492.29	160462.81	989324.26	1009861.70	1020537.44
26	78188.33	125417.42	160404.26	989314.19	1009835.78	1020521.59
25	78170.19	125342.60	160345.77	989304.12	1009809.87	1020505.75
24	78152.05	125267.84	160287.34	989294.04	1009783.96	1020489.92
23	78133.90	125193.13	160228.96	989283.95	1009758.05	1020474.10
22	78115.74	125118.48	160170.64	989273.85	1009732.14	1020458.29
21	78097.57	125043.88	160112.37	989263.75	1009706.24	1020442.49
20	78079.40	124969.33	160054.16	989253.65	1009680.34	1020426.70
19	78061.22	124894.84	159996.00	989243.54	1009654.45	1020410.91
18	78043.04	124820.40	159937.90	989233.42	1009628.56	1020395.14
17	78024.85	124746.02	159879.86	989223.29	1009602.67	1020379.38
16	78006.65	124671.69	159821.87	989213.16	1009576.79	1020363.62
15	77988.45	124597.42	159763.94	989203.03	1009550.90	1020347.88
14	77970.24	124523.20	159706.06	989192.89	1009525.03	1020332.14
13	77952.02	124449.03	159648.24	989182.74	1009499.15	1020316.43
12	77933.80	124374.92	159590.47	989172.58	1009473.28	1020300.70
11	77915.57	124300.86	159532.76	989162.42	1009447.41	1020284.99
10	77897.33	124226.85	159475.11	989152.26	1009421.55	1020269.29
9	77879.08	124152.90	159417.51	989142.08	1009395.69	1020253.60
8	77860.83	124079.00	159359.96	989131.91	1009369.83	1020237.92
7	77842.57	124005.15	159302.47	989121.72	1009343.97	1020222.25
6	77824.31	123931.36	159245.04	989111.53	1009318.12	1020206.59
5	77806.04	123857.62	159187.66	989101.33	1009292.27	1020190.94
4	77787.77	123783.93	159130.33	989091.13	1009266.43	1020175.30
3	77769.49	123710.30	159073.06	989080.92	1009240.59	1020159.66
2	77751.20	123636.72	159015.84	989070.71	1009214.75	1020144.04
1	77732.90	123563.19	158958.68	989060.49	1009188.91	1020128.42
0	77714.60	123489.72	158901.57	989050.26	1009163.08	1020112.82

39	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0	62932.04	80978.40	128675.96	979887.18	990836.92	1010949.74
1	62954.64	81026.58	128706.28	979902.78	990862.75	1010959.97
2	62977.24	81074.78	128736.63	979918.36	990888.58	1010970.21
3	62999.83	81123.00	128767.00	979933.94	990914.40	1010980.46
4	63022.42	81171.24	128797.40	979949.51	990940.22	1010990.71
5	63045.00	81219.51	128827.82	979965.07	990966.03	1011000.97
6	63067.58	81267.80	128858.27	979980.62	990991.85	1011011.23
7	63090.15	81316.11	128888.75	979996.16	991017.66	1011021.50
8	63112.72	81364.44	128919.25	980011.69	991043.47	1011031.78
9	63135.28	81412.80	128949.77	980027.21	991069.27	1011042.06
10	63157.84	81461.18	128980.32	980042.72	991095.07	1011052.35
11	63180.39	81509.58	129010.90	980058.23	991120.87	1011062.64
12	63202.93	81558.01	129041.50	980073.72	991146.66	1011072.94
13	63225.47	81606.46	129072.13	980089.21	991172.45	1011083.25
14	63248.00	81654.93	129102.78	980104.68	991198.24	1011093.56
15	63270.53	81703.42	129133.46	980120.15	991224.03	1011103.88
16	63293.05	81751.95	129164.16	980135.61	991249.81	1011114.20
17	63315.57	81800.49	129194.89	980151.06	991275.59	1011124.53
18	63338.08	81849.05	129225.64	980166.49	991301.37	1011134.87
19	63360.59	81897.64	129256.42	980181.92	991327.14	1011145.21
20	63383.09	81946.25	129287.23	980197.35	991352.91	1011155.56
21	63405.59	81994.88	129318.06	980212.76	991378.68	1011165.92
22	63428.08	82043.54	129348.92	980228.16	991404.44	1011176.28
23	63450.57	82092.23	129379.80	980243.55	991430.20	1011186.65
24	63473.05	82140.93	129410.71	980258.94	991455.96	1011197.02
25	63495.53	82189.65	129441.64	980274.31	991481.71	1011207.40
26	63518.00	82238.40	129472.60	980289.68	991507.47	1011217.79
27	63540.46	82287.18	129503.59	980305.04	991533.22	1011228.17
28	63562.94	82335.97	129534.60	980320.38	991558.96	1011238.58
29	63585.37	82384.79	129565.64	980335.72	991584.71	1011248.98
30	63607.82	82433.64	129596.70	980351.05	991610.45	1011259.39
31	63630.26	82482.51	129627.79	980366.37	991636.18	1011269.81
32	63652.70	82531.40	129658.90	980381.68	991661.92	1011280.23
33	63675.13	82580.31	129690.04	980396.99	991687.65	1011290.66
34	63697.56	82629.25	129721.21	980412.28	991713.38	1011301.10
35	63719.98	82678.21	129752.40	980427.57	991739.11	1011311.54
36	63742.40	82727.19	129783.62	980442.84	991764.83	1011321.99
37	63764.81	82776.20	129814.87	980458.11	991790.55	1011332.44
38	63787.21	82825.23	129846.14	980473.36	991816.27	1011342.90
39	63809.61	82874.29	129877.44	980488.61	991841.98	1011353.37
40	63832.01	82923.37	129908.76	980503.85	991867.69	1011363.84
41	63854.40	82972.47	129940.11	980519.08	991893.40	1011374.32
42	63876.78	83021.60	129971.48	980534.30	991919.11	1011384.81
43	63899.16	83070.75	130002.88	980549.51	991944.81	1011395.30
44	63921.53	83119.92	130034.31	980564.72	991970.51	1011405.80
45	63943.90	83169.12	130065.76	980579.91	991996.21	1011416.30
46	63966.26	83218.34	130097.24	980595.10	992021.91	1011426.81
47	63988.62	83267.59	130128.75	980610.27	992047.60	1011437.33
48	64010.97	83316.86	130160.28	980625.44	992073.29	1011447.85
49	64033.32	83366.15	130191.84	980640.60	992098.98	1011458.38
50	64055.66	83415.47	130223.43	980655.75	992124.66	1011468.91
51	64077.99	83464.81	130255.04	980670.89	992150.34	1011479.45
52	64100.32	83514.18	130286.68	980686.02	992176.02	1011490.00
53	64122.64	83563.57	130318.34	940701.14	992201.70	1011500.55
54	64144.96	83612.98	130350.03	980716.26	992227.37	1011511.11
55	64167.27	83662.42	130381.75	980731.36	992253.04	1011521.68
56	64189.58	83711.88	130413.49	980746.46	992278.71	1011532.25
57	64211.88	83761.36	130445.26	980761.54	992304.37	1011542.83
58	64234.18	83810.87	130477.06	980776.62	992330.04	1011553.41
59	64256.47	83860.40	130508.88	980791.69	992355.70	1011564.01
60	64278.76	83909.96	130540.73	980806.75	992381.35	1011574.60

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tangente	Tomologarith. pro Secante
60	77714.60	123489.72	158901.57	989050.26	1009163.08	1020112.82
59	77696.29	123416.29	158844.52	989040.03	1009137.25	1020097.22
58	77677.97	123342.92	158787.52	989029.79	1009111.42	1020081.64
57	77659.65	123269.61	158730.58	989019.54	1009085.60	1020066.06
56	77641.32	123196.34	158673.69	989009.29	1009059.78	1020050.49
55	77622.98	123123.13	158616.85	988999.03	1009033.97	1020034.93
54	77604.64	123049.97	158560.07	988988.77	1009008.15	1020019.38
53	77586.29	122976.87	158503.34	988978.50	1008982.34	1020003.84
52	77567.94	122901.81	158446.67	988968.22	1008956.53	1019988.31
51	77549.58	122830.81	158390.05	988957.94	1008930.73	1019972.79
50	77531.21	122757.86	158333.48	988947.65	1008904.93	1019957.28
49	77512.83	122684.96	158276.97	988937.36	1008879.13	1019941.77
48	77494.45	122612.11	158220.51	988927.06	1008853.34	1019926.28
47	77476.06	122539.32	158164.11	988916.75	1008827.55	1019910.79
46	77457.67	122466.58	158107.76	988906.44	1008801.76	1019895.32
45	77439.27	122393.89	158051.46	988896.12	1008775.97	1019879.85
44	77420.86	122321.25	157995.21	988885.80	1008750.19	1019864.39
43	77402.44	122248.66	157939.02	988875.47	1008724.41	1019848.94
42	77384.02	122176.13	157882.89	988865.13	1008698.63	1019833.51
41	77365.59	122103.64	157826.80	988854.79	1008672.86	1019818.08
40	77347.16	122031.21	157770.77	988844.44	1008647.09	1019802.65
39	77328.72	121958.83	157714.79	988834.08	1008621.32	1019787.24
38	77310.27	121886.50	157658.87	988823.72	1008595.56	1019771.84
37	77291.82	121814.22	157603.00	988813.35	1008569.80	1019756.45
36	77273.36	121741.99	157547.18	988802.98	1008544.04	1019741.06
35	77254.89	121669.82	157491.41	988792.60	1008518.29	1019725.69
34	77236.42	121597.69	157435.70	988782.21	1008492.53	1019710.32
33	77217.94	121525.62	157380.04	988771.82	1008466.78	1019694.96
32	77199.45	121453.59	157324.43	988761.42	1008441.04	1019679.62
31	77180.96	121381.62	157268.87	988751.02	1008415.29	1019664.28
30	77162.46	121309.70	157213.37	988740.61	1008389.55	1019648.95
29	77143.95	121237.83	157157.92	988730.19	1008363.82	1019633.63
28	77125.44	121166.01	157102.52	988719.77	1008338.08	1019618.32
27	77106.92	121094.24	157047.17	988709.34	1008312.35	1019603.01
26	77088.39	121022.52	156991.88	988698.90	1008286.62	1019587.72
25	77069.86	120950.85	156936.64	988688.46	1008260.89	1019572.43
24	77051.32	120879.23	156881.45	988678.01	1008235.17	1019557.16
23	77032.78	120807.67	156826.31	988667.56	1008209.45	1019541.89
22	77014.23	120736.15	156771.23	988657.10	1008183.73	1019526.64
21	76995.67	120664.68	156716.19	988646.63	1008158.02	1019511.39
20	76977.10	120593.27	156661.21	988636.16	1008132.31	1019496.15
19	76958.53	120521.90	156606.28	988625.68	1008106.60	1019480.92
18	76939.95	120450.58	156551.41	988615.19	1008080.89	1019465.70
17	76921.37	120379.31	156496.58	988604.70	1008055.19	1019450.49
16	76902.78	120308.10	156441.81	988594.20	1008029.49	1019435.28
15	76884.18	120236.93	156387.08	988583.70	1008003.79	1019420.09
14	76865.58	120165.81	156332.41	988573.19	1007978.09	1019404.90
13	76846.97	120094.75	156277.79	988562.67	1007952.40	1019389.73
12	76828.35	120023.73	156223.22	988552.15	1007926.71	1019374.56
11	76809.73	119952.76	156168.70	988541.62	1007901.02	1019359.40
10	76791.10	119881.84	156114.24	988531.09	1007875.34	1019344.25
9	76772.46	119810.97	156059.82	988520.55	1007849.66	1019329.11
8	76753.82	119740.15	156005.46	988510.00	1007823.98	1019313.98
7	76735.17	119669.38	155951.15	988499.45	1007798.30	1019298.86
6	76716.51	119598.66	155896.89	988488.89	1007772.63	1019283.74
5	76697.85	119527.99	155842.67	988478.32	1007746.96	1019268.64
4	76679.18	119457.36	155788.51	988467.75	1007721.29	1019253.54
3	76660.51	119386.79	155734.41	988457.17	1007695.63	1019238.46
2	76641.83	119316.26	155680.35	988446.59	1007669.96	1019223.38
1	76623.14	119245.79	155626.34	988435.99	1007644.30	1019208.31
0	76604.44	119175.36	155572.38	988425.40	1007618.65	1019193.25

40 ′	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0	64278.76	83909.96	130540.73	980806.75	992381.35	1011574.60
1	64301.04	83959.54	130572.61	980821.80	992407.01	1011585.21
2	64323.32	84009.15	130604.51	980836.84	992432.66	1011595.82
3	64345.59	84058.78	130636.44	980851.88	992458.31	1011606.43
4	64367.85	84108.44	130668.39	980866.90	992483.96	1011617.06
5	64390.11	84158.12	130700.37	980881.92	992509.60	1011627.68
6	64412.36	84207.82	130732.38	980896.92	992535.24	1011638.32
7	64434.61	84257.55	130764.42	980911.92	992560.88	1011648.96
8	64456.85	84307.30	130796.49	980926.91	992586.52	1011659.61
9	64479.09	84357.08	130828.58	980941.89	992612.15	1011670.26
10	64501.32	84406.88	130860.70	980956.86	992637.78	1011680.92
11	64523.55	84456.70	130892.84	980971.82	992663.41	1011691.59
12	64545.77	84506.55	130925.01	980986.78	992689.04	1011702.26
13	64567.98	84556.43	130957.21	981001.72	992714.66	1011712.94
14	64590.19	84606.33	130989.43	981016.66	992740.28	1011723.62
15	64612.40	84656.25	131021.68	981031.59	992765.90	1011734.32
16	64634.60	84706.20	131053.96	981046.50	992791.52	1011745.01
17	64656.79	84756.17	131086.26	981061.41	992817.13	1011755.72
18	64678.98	84806.17	131118.59	981076.31	992842.74	1011766.43
19	64701.16	84856.19	131150.95	981091.21	992868.35	1011777.15
20	64723.34	84906.24	131183.34	981106.09	992893.96	1011787.87
21	64745.51	84956.31	131215.75	981120.96	992919.56	1011798.60
22	64767.67	85006.40	131248.19	981135.83	992945.16	1011809.33
23	64789.83	85056.52	131280.66	981150.69	992970.76	1011820.08
24	64811.99	85106.67	131313.16	981165.54	992996.36	1011830.82
25	64834.14	85156.84	131345.68	981180.38	993021.95	1011841.58
26	64856.28	85207.04	131378.23	981195.21	993047.55	1011852.34
27	64878.42	85257.26	131410.81	981210.03	993073.14	1011863.11
28	64900.55	85307.50	131443.41	981224.84	993098.72	1011873.88
29	64922.68	85357.77	131476.04	981239.65	993124.31	1011884.66
30	64944.80	85408.07	131508.70	981254.44	993149.89	1011895.45
31	64966.92	85458.39	131541.39	981269.23	993175.47	1011906.24
32	64989.03	85508.73	131574.10	981284.01	993201.05	1011917.04
33	65011.14	85559.10	131606.84	981298.78	993226.62	1011927.85
34	65033.24	85609.50	131639.61	981313.54	993252.20	1011938.66
35	65055.33	85659.92	131672.41	981328.29	993277.77	1011949.48
36	65077.42	85710.37	131705.23	981343.03	993303.34	1011960.30
37	65099.50	85760.84	131738.08	981357.77	993328.90	1011971.13
38	65121.58	85811.33	131770.96	981372.50	993354.46	1011981.97
39	65143.66	85861.85	131803.86	981387.21	993380.03	1011992.81
40	65165.72	85912.40	131836.79	981401.92	993405.59	1012003.66
41	65187.78	85962.97	131869.75	981416.62	993431.14	1012014.52
42	65209.84	86013.57	131902.74	981431.31	993456.70	1012025.38
43	65231.89	86064.19	131935.76	981446.00	993482.25	1012036.25
44	65253.94	86114.84	131968.81	981460.67	993507.80	1012047.13
45	65275.98	86165.51	132001.88	981475.34	993533.35	1012058.01
46	65298.01	86216.21	132034.98	981489.99	993558.89	1012068.90
47	65320.04	86266.93	132068.11	981504.64	993584.44	1012079.79
48	65342.06	86317.68	132101.26	981519.28	993609.98	1012090.70
49	65364.08	86368.46	132134.44	981533.91	993635.52	1012101.60
50	65386.09	86419.26	132167.65	981548.54	993661.05	1012112.52
51	65408.10	86470.09	132200.89	981563.15	993686.59	1012123.44
52	65430.10	86520.94	132234.16	981577.76	993712.12	1012134.37
53	65452.09	86571.81	132267.45	981592.35	993737.65	1012145.30
54	65474.08	86622.71	132300.77	981606.94	993763.18	1012156.24
55	65496.06	86673.64	132334.12	981621.52	993788.71	1012167.19
56	65518.04	86724.60	132367.50	981636.09	993814.23	1012178.14
57	65540.01	86775.58	132400.91	981650.66	993839.75	1012189.10
58	65561.98	86826.59	132434.35	981665.21	993865.27	1012200.06
59	65583.94	86877.62	132467.81	981679.75	993890.79	1012211.04
60	65605.90	86928.68	132501.30	981694.29	993916.31	1012222.01

′	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
60	76604.44	119175.36	155572.38	988425.40	1007618.65	1019193.25
59	76585.74	119104.98	155518.48	988414.79	1007592.99	1019178.20
58	76567.03	119034.65	155464.62	988404.18	1007567.34	1019163.16
57	76548.32	118964.37	155410.81	988393.57	1007541.69	1019148.12
56	76529.60	118894.14	155357.06	988382.94	1007516.04	1019133.10
55	76510.87	118823.95	155303.35	988372.32	1007490.40	1019118.08
54	76492.14	118753.82	155249.70	988361.68	1007464.76	1019103.08
53	76473.40	118683.73	155196.09	988351.04	1007439.12	1019088.08
52	76454.65	118613.69	155142.54	988340.39	1007413.48	1019073.09
51	76435.90	118543.70	155089.04	988329.74	1007387.85	1019058.11
50	76417.14	118473.76	155035.58	988319.08	1007362.22	1019043.14
49	76398.37	118403.87	154982.18	988308.41	1007336.59	1019028.18
48	76379.60	118334.02	154928.82	988297.74	1007310.96	1019013.22
47	76360.82	118264.22	154875.52	988287.06	1007285.34	1018998.28
46	76342.04	118194.47	154822.26	988276.38	1007259.72	1018983.34
45	76323.25	118124.77	154769.06	988265.68	1007234 10	1018968.41
44	76304.45	118055.12	154715.90	988254.99	1007208.48	1018953.50
43	76285.64	117985.51	154662.80	988244.28	1007182.87	1018938.59
42	76266.83	117915.95	154609.74	988233.57	1007157.26	1018923.69
41	76248.01	117846.44	154556.73	988222.85	1007131.65	1018908.79
40	76229.19	117776.98	154503.78	988212.13	1007106.04	1018893.91
39	76210.36	117707.56	154450.87	988201.40	1007080.44	1018879.04
38	76191.52	117638.20	154398.01	988190.67	1007054.84	1018864.17
37	76172.68	117568.88	154345.20	988179.92	1007029.24	1018849.31
36	76153.83	117499.60	154292.44	988169.18	1007003.64	1018834.46
35	76134.97	117430.38	154239.73	988158.42	1006978.05	1018819.62
34	76116.11	117361.20	154187.06	988147.66	1006952.45	1018804.79
33	76097.24	117292.07	154134.45	988136.89	1006926.86	1018789.97
32	76078.37	117222.98	154081.89	988126.12	1006901.28	1018775.16
31	76059.49	117153.95	154029.37	988115.34	1006875.69	1018760.35
30	76040.60	117084.96	153976.90	988104.55	1006850.11	1018745.56
29	76021.70	117016.01	153924.49	988093.76	1006824.53	1018730.77
28	76002.80	116947.12	153872.12	988082.96	1006798.95	1018715.99
27	75983.89	116878.27	153819.80	988072.15	1006773.38	1018701.22
26	75964.98	116809.47	153767.52	988061.34	1006747.80	1018686.46
25	75946.06	116740.71	153715.30	988050.52	1006722.23	1018671.71
24	75927.13	116672.00	153663.12	988039.70	1006696.66	1018656.97
23	75908.20	116603.34	153611.00	988028.87	1006671.10	1018642.23
22	75889.26	116534.72	153558.92	988018.03	1006645.54	1018627.50
21	75870.31	116466.15	153506.89	988007.19	1006619.97	1018612.79
20	75851.36	116397.63	153454.91	987996.34	1006594.41	1018598.08
19	75832.40	116329.16	153402.97	987985.48	1006568.86	1018583.38
18	75813.43	116260.73	153351.09	987974.62	1006543.30	1018568.69
17	75794.46	116192.34	153299.25	987963.75	1006517.75	1018554.00
16	75775.48	116124.00	153247.46	987952.87	1006492.20	1018539.33
15	75756.50	116055.71	153195.72	987941.99	1006466.65	1018524.66
14	75737.51	115987.47	153144.03	987931.10	1006441.11	1018510.01
13	75718.51	115919.27	153092.38	987920.21	1006415.56	1018495.36
12	75699.50	115851.11	153040.78	987909.30	1006390.02	1018480.72
11	75680.49	115783.01	152989.23	987898.40	1006364.48	1018466.09
10	75661.47	115714.95	152937.73	987887.48	1006338.95	1018451.46
9	75642.45	115646.93	152886.27	987876.56	1006313.41	1018436.85
8	75623.42	115578.96	152834.87	987865.63	1006287.88	1018422.24
7	75604.39	115511.04	152783.51	987854.70	1006262.35	1018407.65
6	75585.35	115443 16	152732.19	987843.76	1006236.82	1018393.06
5	75566.30	115375.32	152680.93	987832.81	1006211.29	1018378.48
4	75547.24	115307.54	152629.71	987821.86	1006185.77	1018363.91
3	75528.18	115239.79	152578.54	987810.90	1006160.25	1018349.34
2	75509.11	115172.10	152527.41	987799.94	1006134.73	1018334.79
1	75490.04	115104.45	152476.34	987788.96	1006109.21	1018320.25
0	75470.96	115036.84	152425.31	987777.99	1006083.69	1018305.71

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0	65605.90	86928.68	132501.30	981694.29	993916.31	1012222.01
1	65627.85	86979.76	132534.82	981708.82	993941.82	1012233.00
2	65649.80	87030.87	132568.37	981723.34	993967.33	1012243.99
3	65671.74	87082.00	132601.94	981737.85	993992.84	1012254.99
4	65693.67	87133.16	132635.54	981752.35	994018.35	1012265.99
5	65715.60	87184.35	132669.18	981766.85	994043.85	1012277.00
6	65737.52	87235.56	132702.84	981781.33	994069.36	1012288.02
7	65759.44	87286.80	132736.53	981795.81	994094.86	1012299.04
8	65781.35	87338.06	132770.25	981810.28	994120.36	1012310.07
9	65803.26	87389.35	132803.99	981824.74	994145.85	1012321.11
10	65825.16	87440.67	132837.76	981839.19	994171.35	1012332.15
11	65847.06	87492.01	132871.56	981853.64	994196.84	1012343.20
12	65868.95	87543.38	132905.39	981868.07	994222.33	1012354.26
13	65890.83	87594.78	132939.25	981882.50	994247.82	1012365.32
14	65912.71	87646.20	132973.14	981896.92	994273.31	1012376.39
15	65934.58	87697.65	133007.06	981911.33	994298.79	1012387.47
16	65956.45	87749.12	133041.00	981925.73	994324.28	1012398.55
17	65978.31	87800.62	133074.97	981940.12	994349.76	1012409.64
18	66000.17	87852.15	133108.97	981954.50	994375.24	1012420.73
19	66022.02	87903.70	133143.00	981968.88	994400.72	1012431.84
20	66043.86	87955.28	133177.06	981983.25	994426.19	1012442.94
21	66065.70	88006.89	133211.15	981997.61	994451.66	1012454.06
22	66087.53	88058.52	133245.27	982011.96	994477.14	1012465.18
23	66109.36	88110.18	133279.42	982026.30	994502.61	1012476.31
24	66131.18	88161.86	133313.59	982040.63	994528.07	1012487.44
25	66153.00	88213.57	133347.79	982054.96	994553.54	1012498.58
26	66174.81	88265.31	133382.02	982069.27	994579.00	1012509.73
27	66196.62	88317.07	133416.28	982083.58	994604.47	1012520.88
28	66218.42	88368.86	133450.57	982097.88	994629.93	1012532.05
29	66240.22	88420.68	133484.89	982112.17	994655.39	1012543.21
30	66262.01	88472.53	133519.24	982126.46	994680.84	1012554.39
31	66283.79	88524.42	133553.62	982140.73	994706.30	1012565.57
32	66305.57	88576.30	133588.03	982155.00	994731.75	1012576.75
33	66327.34	88628.22	133622.46	982169.26	994757.20	1012587.95
34	66349.11	88680.17	133656.92	982183.51	994782.65	1012599.15
35	66370.87	88732.15	133691.41	982197.75	994808.10	1012610.35
36	66392.62	88784.16	133725.94	982211.98	994833.55	1012621.56
37	66414.37	88836.20	133760.49	982226.21	994858.99	1012632.78
38	66436.11	88888.26	133795.07	982240.42	994884.43	1012644.01
39	66457.85	88940.34	133829.68	982254.63	994909.87	1012655.24
40	66479.59	88992.45	133864.32	982268.83	994935.31	1012666.48
41	66501.32	89044.59	133898.99	982283.02	994960.75	1012677.73
42	66523.04	89096.75	133933.69	982297.21	994986.19	1012688.98
43	66544.75	89148.94	133968.42	982311.38	995011.62	1012700.24
44	66566.46	89201.16	134003.17	982325.55	995037.05	1012711.51
45	66588.17	89253.41	134037.95	982339.71	995062.48	1012722.78
46	66609.87	89305.69	134072.76	982353.86	995087.91	1012734.06
47	66631.56	89357.99	134107.61	982368.00	995113.34	1012745.34
48	66653.25	89410.32	134142.48	982382.13	995138.76	1012756.63
49	66674.93	89462.68	134177.38	982396.26	995164.19	1012767.93
50	66696.61	89515.06	134212.32	982410.37	995189.61	1012779.24
51	66718.28	89567.47	134247.28	982424.48	995215.03	1012790.55
52	66739.94	89619.91	134282.27	982438.58	995240.45	1012801.87
53	66761.60	89672.38	134317.29	982452.67	995265.87	1012813.19
54	66783.26	89724.87	134352.34	982466.76	995291.28	1012824.52
55	66804.91	89777.39	134387.42	982480.83	995316.70	1012835.86
56	66826.55	89829.94	134422.53	982494.90	995342.12	1012847.21
57	66848.18	89882.52	134457.67	982508.96	995367.52	1012858.56
58	66869.81	89935.12	134492.84	982523.01	995392.93	1012869.92
59	66891.44	89987.75	134528.04	982537.05	995418.34	1012881.28
60	66913.06	90040.41	134563.27	982551.09	995443.74	1012892.65

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60	75470.96	115036.84	152425.31	987777.99	1006083.69	1018305.71
59	75451.87	114969.28	152374.33	987767.00	1006058.18	1018291.18
58	75432.78	114901.76	152323.39	987756.01	1006032.67	1018276.66
57	75413.68	114834.29	152272.50	987745.01	1006007.16	1018262.15
56	75394.57	114766.87	152221.66	987734.01	1005981.65	1018247.65
55	75375.46	114699.49	152170.87	987723.00	1005956.15	1018233.15
54	75356.34	114632.15	152120.12	987711.98	1005930.64	1018218.67
53	75337.21	114564.86	152069.42	987700.96	1005905.14	1018204.19
52	75318.08	114497.62	152018.76	987689.93	1005879.64	1018189.72
51	75298.94	114430.41	151968.15	987678.89	1005854.15	1018175.26
50	75279.80	114363.26	151917.59	987667.85	1005828.65	1018160.81
49	75260.65	114296.15	151867.08	987656.80	1005803.16	1018146.36
48	75241.49	114229.08	151816.61	987645.74	1005777.67	1018131.93
47	75222.33	114162.06	151766.19	987634.68	1005752.18	1018117.50
46	75203.16	114095.08	151715.81	987623.61	1005726.69	1018103.08
45	75183.98	114028.15	151665.48	987612.53	1005701.21	1018088.67
44	75164.80	113961.26	151615.20	987601.45	1005675.72	1018074.27
43	75145.61	113894.41	151564.96	987590.36	1005650.24	1018059.88
42	75126.41	113827.61	151514.77	987579.27	1005624.76	1018045.50
41	75107.21	113760.85	151464.62	987568.16	1005599.28	1018031.12
40	75088.00	113694.14	151414.52	987557.06	1005573.81	1018016.75
39	75068.79	113627 47	151364.47	987545.94	1005548.34	1018002.39
38	75049.57	113560.85	151314.46	987534.82	1005522.86	1017988.04
37	75030.34	113494.27	151264.50	987523.69	1005497.39	1017973.70
36	75011.11	113427.73	151214.59	987512.56	1005471.93	1017959.37
35	74991.87	113361.24	151164.72	987501.42	1005446.46	1017945.04
34	74972.62	113294.79	151114.89	987490.27	1005421.00	1017930.73
33	74953.37	113228.39	151065.11	987479.12	1005395.53	1017916.42
32	74934.11	113162.03	151015.38	987467.95	1005370.07	1017902.12
31	74914.84	113095.71	150965.69	987456.79	1005344.61	1017887.83
30	74895.57	113029.44	150916.05	987445.61	1005319.16	1017873.54
29	74876.29	112963.21	150866.45	987434.43	1005293.70	1017859.27
28	74857.01	112897.02	150816.90	987423.25	1005268.25	1017845.00
27	74837.72	112830.88	150767.39	987412.05	1005242.80	1017830.74
26	74818.42	112764.78	150717.93	987400.85	1005217.35	1017816.49
25	74799.12	112698.72	150668.52	987389.65	1005191.90	1017802.25
24	74779.81	112632.71	150619.15	987378.44	1005166.45	1017788.02
23	74760.49	112566.74	150569.82	987367.22	1005141.01	1017773.79
22	74741.17	112500.81	150520.54	987355.99	1005115.57	1017759.58
21	74721.84	112434.93	150471.31	987344.76	1005090.13	1017745.37
20	74702.51	112369.09	150422.11	987333.52	1005064.69	1017731.17
19	74683.17	112303.29	150372.97	987322.27	1005039.25	1017716.98
18	74663.82	112237.54	150323.87	987311.02	1005013.81	1017702.79
17	74644.46	112171.83	150274.81	987299.76	1004988.38	1017688.62
16	74625.10	112106.16	150225.80	987288.49	1004962.95	1017674.45
15	74605.74	112040.53	150176.83	987277.22	1004937.52	1017660.29
14	74586.37	111974.95	150127.91	987265.94	1004912.09	1017646.14
13	74566.99	111909.41	150079.03	987254.66	1004886.66	1017632.00
12	74547.60	111843.91	150030.20	987243.37	1004861.24	1017617.87
11	74528.21	111778.46	149981.41	987232.07	1004835.81	1017603.74
10	74508.81	111713.05	149932.67	987220.76	1004810.39	1017589.63
9	74489.40	111647.68	149883.97	987209.45	1004784.97	1017575.52
8	74469.99	111582.35	149835.31	987198.13	1004759.55	1017561.42
7	74450.57	111517.06	149786.70	987186.81	1004734.13	1017547.33
6	74431.15	111451.82	149738.13	987175.48	1004708.72	1017533.24
5	74411.72	111386.62	149689.61	987164.14	1004683.30	1017519.17
4	74392.29	111321.46	149641.13	987152.79	1004657.89	1017505.10
3	74372.85	111256.35	149592.70	987141.44	1004632.48	1017491.04
2	74353.40	111191.27	149544.30	987130.08	1004607.07	1017476.99
1	74333.94	111126.24	149495.96	987118.72	1004581.66	1017462.95
0	74314.48	111061.25	149447.65	987107.35	1004556.26	1017448.91

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0	66913.06	90040.41	134563.27	982551.09	995443.74	1012892.65
1	66934.67	90093.09	134598.53	982565.12	995469.15	1012904.03
2	66956.28	90145.80	134633.82	982579.13	995494.55	1012915.42
3	66977.88	90198.54	134669.14	982593.14	995519.95	1012926.81
4	66999.48	90251.31	134704.49	982607.15	995545.35	1012938.21
5	67021.07	90304.11	134739.87	982621.14	995570.75	1012949.61
6	67042.66	90356.94	134775.28	982635.12	995596.15	1012961.02
7	67064.24	90409.79	134810.72	982649.10	995621.54	1012972.44
8	67085.82	90462.67	134846.19	982663.07	995646.94	1012983.87
9	67107.39	90515.58	134881.69	982677.03	995672.33	1012995.30
10	67128.95	90568.51	134917.21	982690.98	995697.72	1013006.74
11	67150.51	90621.47	134952.77	982704.93	995723.11	1013018.18
12	67172.06	90674.46	134988.36	982718.87	995748.50	1013029.63
13	67193.61	90727.48	135023.98	982732.79	995773.89	1013041.09
14	67215.15	90780.53	135059.63	982746.71	995799.27	1013052.56
15	67236.68	90833.60	135095.31	982760.63	995824.65	1013064.03
16	67258.21	90886.71	135131.02	982774.53	995850.04	1013075.51
17	67279.73	90939.84	135166.76	982788.43	995875.42	1013086.99
18	67301.25	90993.00	135202.54	982802.31	995900.80	1013098.48
19	67322.76	91046.19	135238.34	982816.19	995926.18	1013109.98
20	67344.27	91099.41	135274.17	982830.06	995951.55	1013121.49
21	67365.77	91152.65	135310.03	982843.93	995976.93	1013133.00
22	67387.27	91205.92	135345.93	982857.78	996002.30	1013144.52
23	67408.76	91259.22	135381.86	982871.63	996027.67	1013156.04
24	67430.24	91312.55	135417.81	982885.47	996053.05	1013167.58
25	67451.72	91365.91	135453.79	982899.30	996078.42	1013179.12
26	67473.19	91419.29	135489.80	982913.12	996103.78	1013190.66
27	67494.66	91472.70	135525.85	982926.94	996129.15	1013202.21
28	67516.12	91526.15	135561.93	982940.75	996154.52	1013213.77
29	67537.57	91579.62	135598.03	982954.54	996179.88	1013225.34
30	67559.02	91633.12	135634.17	982968.33	996205.25	1013236.91
31	67580.46	91686.65	135670.34	982982.12	996230.61	1013248.49
32	67601.90	91740.20	135706.54	982995.89	996255.97	1013260.08
33	67623.33	91793.79	135742.77	983009.66	996281.33	1013271.67
34	67644.76	91847.40	135779.03	983023.42	996306.69	1013283.27
35	67606.18	91901.04	135815.32	983037.17	996332.04	1013294.88
36	67687.60	91954.71	135851.64	983050.91	996357.40	1013306.49
37	67709.01	92008.41	135888.00	983064.64	996382.75	1013318.11
38	67730.41	92062.14	135924.38	983078.37	996408.11	1013329.74
39	67751.81	92115.90	135960.80	983092.09	996433.46	1013341.37
40	67773.20	92169.68	135997.25	983105.80	996458.81	1013353.01
41	67794.59	92223.50	136033.72	983119.50	996484.16	1013364.66
42	67815.97	92277.34	136070.23	983133.20	996509.51	1013376.31
43	67837.34	92331.22	136106.77	983146.88	996534.86	1013387.97
44	67858.71	92385.12	136143.34	983160.56	996560.20	1013399.64
45	67880.07	92439.05	136179.95	983174.23	996585.55	1013411.32
46	67901.43	92493.01	136216.58	983187.89	996610.89	1013423.00
47	67922.78	92547.00	136253.24	983201.55	996636.23	1013434.69
48	67944.13	92601.01	136289.94	983215.19	996661.57	1013446.38
49	67965.47	92655.06	136326.67	983228.83	996686.92	1013458.08
50	67986.81	92709.14	136363.43	983242.46	996712.25	1013469.79
51	68008.14	92763.24	136400.22	983256.09	996737.59	1013481.51
52	68029.46	92817.38	136437.04	983269.70	996762.93	1013493.23
53	68050.78	92871.54	136473.89	983283.31	996788.27	1013504.96
54	68072.09	92925.73	136510.78	983296.91	996813.60	1013516.69
55	68093.39	92979.96	136546.70	983310.50	996838.93	1013528.44
56	68114.69	93034.21	136584.64	983324.08	996864.27	1013540.19
57	68135.99	93088.49	136621.62	983337.66	996889.60	1013551.94
58	68157.28	93142.80	136658.63	983351.22	996914.93	1013563.71
59	68178.56	93197.14	136695.67	983364.78	996940.26	1013575.48
60	68199.84	93251.51	136732.75	983378.33	996965.59	1013587.25

°	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
60	74314.48	111061.25	149447.65	987107.35	1004556.26	1017448.91
59	74295.01	110996.30	149399.40	987095.97	1004530.85	1017434.88
58	74275.54	110931.40	149351.18	987084.58	1004505.45	1017420.87
57	74256.06	110866.53	149303.01	987073.19	1004480.05	1017406.86
56	74236.57	110801.71	149254.88	987061.79	1004454.65	1017392.85
55	74217.08	110736.93	149206.80	987050.39	1004429.25	1017378.86
54	74197.58	110672.19	149158.75	987038.98	1004403.85	1017364.88
53	74178.08	110607.50	149110.76	987027.56	1004378.46	1017350.90
52	74158.57	110542.84	149062.80	987016.13	1004353.06	1017336.93
51	74139.05	110478.23	149014.89	987004.70	1004327.67	1017322.97
50	74119.53	110413.65	148967.03	986993.26	1004302.28	1017309.02
49	74100.00	110349.12	148919.20	986981.82	1004276.89	1017295.07
48	74080.46	110284.63	148871.42	986970.37	1004251.50	1017281.13
47	74060.92	110220.19	148823.69	986958.91	1004226.11	1017267.21
46	74041.37	110155.78	148775.99	986947.44	1004200.73	1017253.29
45	74021.81	110091.41	148728.34	986935.97	1004175.35	1017239.37
44	74002.25	110027.09	148680.73	986924.49	1004149.96	1017225.47
43	73982.68	109962.81	148633.17	986913.01	1004124.58	1017211.57
42	73963.11	109898.56	148585.65	986901.52	1004099.20	1017197.69
41	73943.53	109834.36	148538.17	986890.02	1004073.82	1017183.81
40	73923.94	109770.20	148490.73	986878.51	1004048.45	1017169.94
39	73904.35	109706.08	148443.34	986867.00	1004023.07	1017156.07
38	73884.75	109642.01	148395.99	986855.48	1003997.70	1017142.22
37	73865.15	109577.97	148348.68	986843.96	1003972.33	1017128.37
36	73845.54	109513.97	148301.42	986832.42	1003946.95	1017114.53
35	73825.92	109450.02	148254.20	986820.88	1003921.58	1017100.70
34	73806.29	109386.10	148207.02	986809.34	1003896.22	1017086.88
33	73786.66	109322.23	148159.88	986797.79	1003870.85	1017073.06
32	73767.02	109258.40	148112.78	986786.23	1003845.48	1017059.25
31	73747.38	109194.60	148065.73	986774.66	1003820.12	1017045.46
30	73727.73	109130.85	148018.72	986763.09	1003794.75	1017031.67
29	73708.08	109067.14	147971.76	986751.51	1003769.39	1017017.88
28	73688.42	109003.47	147924.83	986739.92	1003744.03	1017004.11
27	73668.75	108939.83	147877.95	986728.33	1003718.67	1016990.34
26	73649.07	108876.24	147831.11	986716.73	1003693.31	1016976.58
25	73629.39	108812.69	147784.31	986705.12	1003667.96	1016962.83
24	73609.71	108749.18	147737.55	986693.51	1003642.60	1016949.09
23	73590.02	108685.71	147690.84	986681.89	1003617.25	1016935.36
22	73570.32	108622.28	147644.17	986670.26	1003591.89	1016921.63
21	73550.61	108558.89	147597.54	986658.63	1003566.54	1016907.91
20	73530.90	108495.54	147550.95	986646.99	1003541.19	1016894.20
19	73511.18	108432.23	147504.40	986635.34	1003515.84	1016880.50
18	73491.46	108368.96	147457.90	986623.69	1003490.49	1016866.80
17	73471.73	108305.73	147411.44	986612.03	1003465.14	1016853.12
16	73451.99	108242.54	147365.01	986600.36	1003439.80	1016839.44
15	73432.25	108179.39	147318.64	986588.68	1003414.45	1016825.37
14	73412.50	108116.28	147272.30	986577.00	1003389.11	1016812.11
13	73392.75	108053.21	147226.00	986565.31	1003363.77	1016798.45
12	73372.99	107990.18	147179.75	986553.62	1003338.43	1016784.81
11	73353.22	107927.18	147133.53	986541.92	1003313.08	1016771.17
10	73333.45	107864.23	147087.36	986530.21	1003287.75	1016757.54
9	73313.67	107801.32	147041.23	986518.49	1003262.41	1016743.91
8	73293.88	107738.44	146995.14	986506.77	1003237.07	1016730.30
7	73274.09	107675.61	146949.10	986495.04	1003211.73	1016716.69
6	73254.29	107612.82	146903.09	986483.31	1003186.40	1016703.09
5	73234.48	107550.06	146857.13	986471.56	1003161.07	1016689.50
4	73214.67	107487.34	146811.20	986459.81	1003135.73	1016675.92
3	73194.85	107424.67	146765.32	986448.06	1003110.40	1016662.34
2	73175.03	107362.03	146719.48	986436.29	1003085.07	1016648.78
1	73155.20	107299.43	146673.68	986424.52	1003059.74	1016635.22
0	73135.37	107236.87	146627.92	986412.75	1003034.41	1016621.67

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0	68199.84	93251.51	136732.75	983378.33	996965.59	1013587.25
1	68221.11	93305.91	136769.85	983391.88	996990.91	1013599.04
2	68242.37	93360.34	136806.99	983405.41	997016.24	1013610.83
3	68263.63	93414.79	136844.16	983418.94	997041.57	1013622.63
4	68284.88	93469.28	136881.36	983432.46	997066.89	1013634.43
5	68306.13	93523.80	136918.59	983445.97	997092.21	1013646.24
6	68327.37	93578.34	136955.86	983459.48	997117.54	1013658.06
7	68348.61	93632.92	136993.15	983472.97	997142.86	1013669.89
8	68369.84	93687.53	137030.48	983486.46	997168.18	1013681.72
9	68391.07	93742.16	137067.84	983499.94	997193.50	1013693.56
10	68412.29	93796.83	137105.23	983513.41	997218.82	1013705.40
11	68433.50	93851.52	137142.66	983526.88	997244.13	1013717.26
12	68454.71	93906.25	137180.11	983540.33	997269.45	1013729.12
13	68475.91	93961.01	137217.60	983553.78	997294.77	1013740.98
14	68497.11	94015.79	137255.12	983567.22	997320.08	1013752.86
15	68518.30	94070.61	137292.68	983580.66	997345.39	1013764.74
16	68539.48	94125.45	137330.26	983594.08	997370.71	1013776.62
17	68560.66	94180.33	137367.88	983607.50	997396.02	1013788.52
18	68581.83	94235.23	137405.53	983620.91	997421.33	1013800.42
19	68603.00	94290.17	137443.21	983634.31	997446.64	1013812.33
20	68624.16	94345.13	137480.92	983647.71	997471.95	1013824.24
21	68645.32	94400.13	137518.67	983661.09	997497.26	1013836.17
22	68666.47	94455.16	137556.45	983674.47	997522.57	1013848.10
23	68687.61	94510.21	137594.26	983687.84	997547.87	1013860.03
24	68708.75	94565.30	137632.10	983701.21	997573.18	1013871.97
25	68729.88	94620.42	137669.98	983714.56	997598.49	1013883.92
26	68751.01	94675.56	137707.80	983727.91	997623.79	1013895.88
27	68772.13	94730.74	137745.83	983741.25	997649.09	1013907.85
28	68793.24	94785.95	137783.80	983754.58	997674.40	1013919.82
29	68814.35	94841.19	137821.81	983767.90	997699.70	1013931.79
30	68835.45	94896.46	137859.85	983781.22	997725.00	1013943.78
31	68856.55	94951.76	137897.92	983794.53	997750.30	1013955.77
32	68877.64	95007.09	137936.02	983807.83	997775.60	1013967.77
33	68898.73	95062.45	137974.16	983821.12	997800.90	1013979.78
34	68919.81	95117.84	138012.33	983834.41	997826.20	1013991.79
35	68940.89	95173.26	138050.53	983847.69	997851.49	1014003.81
36	68961.96	95228.71	138088.77	983860.96	997876.79	1014015.84
37	68983.02	95284.20	138127.04	983874.22	997902.09	1014027.87
38	69004.07	95339.71	138165.34	983887.47	997927.38	1014039.91
39	69025.12	95395.26	138203.67	983900.72	997952.68	1014051.96
40	69046.17	95450.83	138242.04	983913.96	997977.97	1014064.01
41	69067.21	95506.44	138280.44	983927.19	998003.26	1014076.07
42	69088.24	95562.08	138318.87	983940.41	998028.56	1014088.14
43	69109.27	95617.74	138357.34	983953.63	998053.85	1014100.22
44	69130.29	95673.44	138395.84	983966.84	998079.14	1014112.30
45	69151.31	95729.17	138434.37	983980.04	998104.43	1014124.39
46	69172.32	95784.94	138472.94	983993.23	998129.72	1014136.49
47	69193.32	95840.73	138511.54	984006.42	998155.01	1014148.59
48	69214.32	95896.55	138550.17	984019.59	998180.30	1014160.71
49	69235.31	95952.41	138588.83	984032.76	998205.59	1014172.82
50	69256.30	96008.29	138627.53	984045.93	998230.87	1014184.95
51	69277.28	96064.21	138666.26	984059.08	998256.16	1014197.08
52	69298.25	96120.16	138705.03	984072.23	998281.45	1014209.22
53	69319.22	96176.14	138743.83	984085.37	998306.73	1014221.37
54	69340.18	96232.15	138782.66	984098.50	998332.02	1014233.52
55	69361.14	96288.19	138821.53	984111.62	998357.30	1014245.68
56	69382.09	96344.27	138860.42	984124.74	998382.59	1014257.85
57	69403.04	96400.37	138899.36	984137.85	998407.87	1014270.02
58	69423.98	96456.51	138938.32	984150.95	998433.15	1014282.21
59	69444.91	96512.68	138977.32	984164.04	998458.44	1014294.39
60	69465.84	96568.88	139016.36	984177.13	998483.72	1014306.59

′	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
60	73135.37	107236.87	146627.92	986412.75	1003034.41	1016621.67
59	73115.53	107174.35	146582.20	986400.96	1003009.09	1016608.1[illegible]
58	73095.68	107111.87	146536.52	986389.17	1002983.76	1016594.59
57	73075.83	107049.43	146490.88	986377.37	1002958.43	1016581.06
56	73055.97	106987.02	146445.29	986365.57	1002933.11	1016567.54
55	73036.10	106924.66	146399.73	986353.76	1002907.79	1016554.03
54	73016.23	106862.33	146354.22	986341.94	1002882.46	1016540.52
53	72996.35	106800.04	146308.75	986330.11	1002857.14	1016527.03
52	72976.46	106737.79	146263.31	986318.28	1002831.82	1016513.54
51	72956.57	106675.58	146217.92	986306.44	1002806.50	1016500.06
50	72936.67	106613.41	146172.57	986294.60	1002781.18	1016486.59
49	72916.77	106551.28	146127.26	986282.74	1002755.87	1016473.12
48	72896.86	106489.18	146081.98	986270.88	1002730.55	1016459.67
47	72876.94	106427.13	146036.75	986259.02	1002705.23	1016446.22
46	72857.02	106365.11	145991.56	986247.14	1002679.92	1016432.78
45	72837.09	106303.13	145946.41	986235.26	1002654.61	1016419.34
44	72817.16	106241.19	145901.30	986223.38	1002629.29	1016405.92
43	72797.22	106179.29	145856.23	986211.48	1002603.98	1016392.50
42	72777.27	106117.42	145811.20	986199.58	1002578.67	1016379.09
41	72757.32	106055.60	145766.21	986187.67	1002553.36	1016365.69
40	72737.36	105993.81	145721.27	986175.76	1002528.05	1016352.29
39	72717.40	105932.06	145676.36	986163.83	1002502.74	1016338.91
38	72697.43	105870.34	145631.49	986151.90	1002477.43	1016325.53
37	72677.45	105808.67	145586.66	986139.97	1002452.13	1016312.16
36	72657.47	105747.03	145541.87	986128.03	1002426.82	1016298.79
35	72637.48	105685.44	145497.12	986116.08	1002401.51	1016285.44
34	72617.48	105623.88	145452.41	986104.12	1002376.21	1016272.09
33	72597.48	105562.35	145407.74	986092.15	1002350.91	1016258.75
32	72577.47	105500.87	145363.11	986080.18	1002325.60	1016245.42
31	72557.46	105439.42	145318.52	986068.21	1002300.30	1016232.10
30	72537.44	105378.01	145273.97	986056.22	1002275.00	1016218.78
29	72517.41	105316.64	145229.46	986044.23	1002249.70	1016205.47
28	72497.38	105255.31	145184.98	986032.23	1002224.40	1016192.17
27	72477.34	105194.01	145140.55	986020.22	1002199.10	1016178.88
26	72457.29	105132.75	145096.16	986008.21	1002173.80	1016165.59
25	72437.24	105071.53	145051.81	985996.19	1002148.51	1016152.31
24	72417.18	105010.34	145007.49	985984.16	1002123.21	1016139.04
23	72397.12	104949.20	144963.22	985972.13	1002097.91	1016125.78
22	72377.05	104888.09	144918.98	985960.09	1002072.62	1016112.53
21	72356.98	104827.02	144874.78	985948.04	1002047.32	1016099.28
20	72336.90	104765.98	144830.63	985935.99	1002022.03	1016086.04
19	72316.81	104704.98	144786.51	985923.93	1001996.74	1016072.81
18	72296.71	104644.02	144742.43	985911.86	1001971.44	1016059.59
17	72276.61	104583.10	144698.39	985899.78	1001946.15	1016046.37
16	72256.51	104522.21	144654.39	985887.70	1001920.86	1016033.16
15	72236.40	104461.36	144610.43	985875.61	1001895.57	1016019.96
14	72216.28	104400.55	144566.51	985863.51	1001870.28	1016006.77
13	72196.15	104339.77	144522.62	985851.41	1001844.99	1015993.58
12	72176.02	104279.04	144478.78	985839.29	1001819.70	1015980.41
11	72155.88	104218.33	144434.97	985827.18	1001794.41	1015967.24
10	72135.74	104157.67	144391.20	985815.05	1001769.13	1015954.07
9	72115.59	104097.04	144347.48	985802.92	1001743.84	1015940.92
8	72095.44	104036.45	144303.79	985790.78	1001718.55	1015927.77
7	72075.28	103975.89	144260.13	985778.63	1001693.27	1015914.63
6	72055.11	103915.37	144216.52	985766.48	1001667.98	1015901.50
5	72034.94	103854.89	144172.95	985754.32	1001642.70	1015888.38
4	72014.76	103794.45	144129.41	985742.15	1001617.41	1015875.26
3	71994.57	103734.04	144085.91	985729.98	1001592.13	1015862.15
2	71974.38	103673.67	144042.46	985717.79	1001566.85	1015849.05
1	71954.18	103613.33	143999.04	985705.61	1001541.56	1015835.96
0	71933.98	103553.03	143955.65	985693.41	1001516.28	1015822.87

	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
0	69465.84	96568.88	139016.36	984177.13	998483.72	1014306.59
1	69486.76	96625.11	139055.43	984190.21	998509.00	1014318.79
2	69507.67	96681.37	139094.53	984203.28	998534.28	1014331.00
3	69528.58	96737.67	139133.66	984216.34	998559.56	1014343.22
4	69549.49	96794.00	139172.83	984229.39	998584.84	1014355.45
5	69570.39	96850.35	139212.03	984242.44	998610.12	1014367.68
6	69591.28	96906.74	139251.27	984255.48	998635.40	1014379.92
7	69612.17	96963.16	139290.54	984268.51	998660.68	1014392.16
8	69633.05	97019.62	139329.85	984281.54	998685.96	1014404.42
9	69653.92	97076.10	139369.18	984294.56	998711.23	1014416.68
10	69674.79	97132.62	139408.56	984307.57	998736.51	1014428.94
11	69695.65	97189.17	139447.96	984320.57	998761.79	1014441.22
12	69716.51	97245.75	139487.40	984333.56	998787.06	1014453.50
13	69737.36	97302.36	139526.88	984346.55	998812.34	1014465.79
14	69758.21	97359.01	139566.39	984359.53	998837.61	1014478.08
15	69779.05	97415.69	139605.93	984372.50	998862.89	1014490.39
16	69799.88	97472.40	139645.51	984385.47	998888.16	1014502.70
17	69820.71	97529.14	139685.12	984398.42	998913.44	1014515.01
18	69841.53	97585.91	139724.77	984411.37	998938.71	1014527.34
19	69862.34	97642.72	139764.45	984424.32	998963.99	1014539.67
20	69883.15	97699.56	139804.16	984437.25	998989.26	1014552.01
21	69903.96	97756.43	139843.61	984450.18	999014.53	1014564.36
22	69924.76	97813.33	139883.69	984463.10	999039.81	1014576.71
23	69945.55	97870.27	139923.51	984476.01	999065.08	1014589.07
24	69966.33	97927.24	139963.36	984488.91	999090.35	1014601.44
25	69987.11	97984.24	140003.25	984501.81	999115.62	1014613.81
26	70007.89	98041.27	140043.17	984514.70	999140.89	1014626.19
27	70028.66	98098.33	140083.13	984527.58	999166.16	1014638.58
28	70049.42	98155.43	140123.12	984540.45	999191.43	1014650.98
29	70070.18	98212.56	140163.15	984553.32	999216.70	1014663.38
30	70090.93	98269.73	140203.21	984566.18	999241.97	1014675.79
31	70111.67	98326.92	140243.30	984579.03	999267.24	1014688.21
32	70132.41	98384.15	140283.43	984591.88	999292.51	1014700.64
33	70153.14	98441.41	140323.60	984604.71	999317.78	1014713.07
34	70173.87	98498.71	140363.80	984617.54	999343.05	1014725.51
35	70194.59	98556.03	140404.03	984630.36	999368.32	1014737.96
36	70215.30	98613.39	140444.30	984643.18	999393.59	1014750.41
37	70236.01	98670.79	140484.60	984655.99	999418.86	1014762.87
38	70256.71	98728.21	140524.94	984668.79	999444.13	1014775.34
39	70277.41	98785.67	140565.32	984681.58	999469.40	1014787.82
40	70298.10	98843.16	140605.73	984694.36	999494.66	1014800.30
41	70318.79	98900.69	140646.17	984707.14	999519.93	1014812.79
42	70339.47	98958.25	140686.65	984719.91	999545.20	1014825.29
43	70360.14	99015.84	140727.17	984732.67	999570.47	1014837.80
44	70380.81	99073.46	140767.72	984745.43	999595.73	1014850.31
45	70401.47	99131.12	140808.31	984758.17	999621.00	1014862.83
46	70422.13	99188.81	140848.93	984770.91	999646.27	1014875.35
47	70442.78	99246.54	140889.58	984783.65	999671.54	1014887.89
48	70463.42	99304.29	140930.28	984796.37	999696.80	1014900.43
49	70484.06	99362.08	140971.00	984809.09	999722.07	1014912.98
50	70504.69	99419.91	141011.77	984821.80	999747.34	1014925.54
51	70525.32	99477.77	141052.56	984834.50	999772.60	1014938.10
52	70545.94	99535.66	141093.40	984847.20	999797.87	1014950.67
53	70566.55	99593.58	141134.27	984859.89	999823.14	1014963.25
54	70587.16	99651.54	141175.17	984872.57	999848.40	1014975.83
55	70607.76	99709.53	141216.11	984885.24	999873.67	1014988.43
56	70628.35	99767.56	140257.09	984897.91	999898.93	1015001.03
57	70648.94	99825.62	141298.10	984910.57	999924.20	1015013.63
58	70669.53	99883.71	141339.15	984923.22	999949.47	1015026.25
59	70690.11	99941.84	141380.24	984935.86	999974.73	1015038.87
60	70710.68	100000.00	141421.36	984948.50	100000.00	1015051.50

'	SINVS	TANGENS	SECANS	Logarithmus pro Sinu	Mesologarith. pro Tãgente	Tomologarith. pro Secante
60	71933.98	103553.03	143955.65	985693.41	1001516.28	1015822.87
59	71913.77	103492.77	143912.31	985681.21	1001491.00	1015809.79
58	71893.55	103432.54	143869.00	985669.00	1001465.72	1015796.72
57	71873.33	103372.35	143825.74	985656 78	1001440.44	1015783.66
56	71853.10	103312.20	143782.51	985644.55	1001415.16	1015770.61
55	71832.87	103252.08	143739.32	985632.32	1001389.88	1015757.56
54	71812.63	103191.99	143696.16	985620.08	1001364.60	1015744.52
53	71792.38	103131.95	143653.05	985607.84	1001339.32	1015731.49
52	71772.13	103071.94	143609.97	985595.58	1001314.04	1015718.46
51	71751.87	103011.96	143566.93	985583.32	1001288.77	1015705.44
50	71731.61	102952.03	143523.93	985571.06	1001263.49	1015692.43
49	71711.34	102892.12	143480.97	985558.78	1001238.21	1015679.43
48	71691.06	102832.26	143438.05	985546.50	1001212.94	1015666.44
47	71670 78	102772.43	143395.16	985534.21	1001187.66	1015653.45
46	71650.49	102712.63	143352.31	985521.92	1001162.39	1015640.47
45	71630.19	102652.87	143309.50	985509.61	1001137.11	1015627.50
44	71609.89	102593.15	143266.72	985497.30	1001111.84	1015614.53
43	71589.58	102533.46	143223.99	985484.99	1001086.56	1015601.58
42	71569.27	102473.81	143181.29	985472.66	1001061.29	1015588.63
41	71548.95	102414.19	143138.63	985460.33	1001036.01	1015575.68
40	71528.63	102354.61	143096.00	985447.99	1001010.74	1015562.75
39	71508.30	102295.06	143053.42	985435.64	1000985.47	1015549.82
38	71487.96	102235.55	143010.87	985423.29	1000960.19	1015536.90
37	71467.62	102176.08	142968 36	985410.93	1000934.92	1015523.99
36	71447.27	102116.64	142925.88	985398.56	1000909.65	1015511.09
35	71426.91	102057.23	142883.44	985386.19	1000884.38	1015498.19
34	71406.55	101997.86	142841.04	985373.81	1000859.11	1015435.30
33	71386.18	101938.53	142798.68	985361.42	1000833.84	1015472.42
32	71365.81	101879.23	142756.36	985349.02	1000808.57	1015459.55
31	71345.43	101819.97	142714.07	985336.62	1000783.30	1015446.68
30	71325.05	101760.74	142671.82	985324.21	1000758.03	1015433.82
29	71304.66	101701.55	142629.61	985311.79	1000732.76	1015420.97
28	71284.26	101642.39	142587.43	985299.36	1000707.49	1015408.12
27	71263.85	101583.26	142545.29	985286.93	1000682.22	1015395.29
26	71243.44	101524.17	142503.19	985274.49	1000656.95	1015382.46
25	71223.02	101465.12	142461.12	985262.04	1000631.68	1015369.64
24	71202.60	101406.10	142419.09	985249.59	1000606.41	1015356.82
23	71182.17	101347.12	142377.10	985237.13	1000581.14	1015344.01
22	71161.74	101288.17	142335.14	985224.66	1000555.87	1015331.21
21	71141.30	101229.25	142293.23	985212.18	1000530.60	1015318.42
20	71120.86	101170.37	142251.34	985199.70	1000505.34	1015305.64
19	71100.41	101111.53	142209.50	985187.21	1000480.07	1015292.86
18	71079.95	101052.72	142167.69	985174.71	1000454.80	1015280.09
17	71059.48	100993.94	142125.92	985162.20	1000429.53	1015267.33
16	71039.01	100935.20	142084.18	985149.69	1000404.27	1015254.57
15	71018.54	100876.49	142042 48	985137.17	1000379.00	1015241.83
14	70998.06	100817.82	142000.82	985124.65	1000353.73	1015229.09
13	70977.57	100759.18	141959.19	985112.11	1000328.46	1015216.35
12	70957.07	100700.58	141917.61	985099.57	1000303.20	1015203.63
11	70936.57	100642.01	141876.05	985087.02	1000277.93	1015190.91
10	70916.07	100583.47	141834.54	985074.46	1000252.66	1015178.20
9	70895.56	100524.97	141793.05	985061.90	1000227.40	1015165.50
8	70875.04	100466.51	141751.61	985049.33	1000202.13	1015152.80
7	70854 51	100408.07	141710.20	985036.75	1000176.86	1015140.11
6	70833.98	100349.68	141668.83	985024.17	1000151.60	1015127.43
5	70813.45	100291.31	141627.49	985011.57	1000126.33	1015114.76
4	70792.91	100232.98	141586.19	984998.97	1000101.07	1015102.09
3	70772.36	100174.69	141544.93	984986.37	1000075.80	1015089.43
2	70751.80	100116.42	141503.70	984973.75	1000050.53	1015076.78
1	70731.24	100058.19	141462.51	984961.13	1000025.27	1015064.14
0	70710.68	100000.00	141421.36	984948.50	1000000.00	1015051.50

Finis Canonis.

Chilias Numerorum ab Vnitate vsq; ad 1000, cum eorum Logarithmis, ac differentijs.

Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.
0	0	30	147712.13	60	177815.13	90	195424.25	120	207918.12	150	217609.13
	0		1424.04		717.85		479.89		360.42		288.56
1	000000.00	31	149136.17	61	178532.98	91	195904.14	121	208278.54	151	217897.69
	30103.00		1378.83		706.19		474.64		357.44		286.67
2	030103.00	32	150515.00	62	179239.17	92	196378.78	122	208635.98	152	218184.36
	17609.13		1336.39		694.88		469.51		354.53		284.78
3	047712.13	33	151851.39	63	179934.05	93	196848.29	123	208990.51	153	218469.14
	12493.87		1296.50		683.95		464.50		351.66		282.93
4	060206.00	34	153147.89	64	180618.00	94	197312.79	124	209342.17	154	218752.07
	9691.00		1258.91		673.34		459.57		348.83		281.10
5	069897.00	35	154406.80	65	181291.34	95	197772.36	125	209691.00	155	219033.17
	7918.13		1223.45		663.05		454.76		346.05		279.29
6	077815.13	36	155630.25	66	181954.39	96	198227.12	126	210037.05	156	219312.46
	6694.67		1198.92		653.09		450.05		343.32		277.51
7	084509.80	37	156820.17	67	182607.48	97	198677.17	127	210380.37	157	219589.97
	5799.20		1158.19		643.41		445.44		340.63		275.74
8	090309.00	38	157978.36	68	183250.89	98	199122.61	128	210721.00	158	219865.71
	5115.25		1128.10		634.02		440.91		337.97		274.00
9	095424.25	99	159106.46	69	183884.91	99	199563.52	129	211058.97	159	220139.71
	4575.75		1099.54		624.89		436.48		335.37		272.29
10	100000.00	40	160206.00	70	184509.80	100	200000.00	130	211394.34	160	220412.00
	4139.27		1072.39		616.03		432.14		332.79		270.59
11	104139.27	41	161278.39	71	185125.83	101	200432.14	131	211727.13	161	220682.59
	3778.85		1046.54		607.42		427.88		330.26		268.91
12	107918.12	42	162324.93	72	185733.25	102	200860.02	132	212057.39	162	220951.50
	3476.22		1021.92		599.04		423.70		327.77		267.26
13	111394.34	43	163346.85	73	186332.29	103	201283.72	133	212385.16	163	221218.76
	3218.46		998.42		590.88		419.61		325.32		265.62
14	114612.80	44	164345.27	74	186923.17	104	201703.33	134	212710.48	164	221484.38
	2996.33		975.98		582.96		415.60		322.90		264.01
15	117609.13	45	165321.25	75	187506.13	105	202118.93	135	213033.38	165	221748.39
	2802.87		954.53		575.23		411.66		320.51		262.42
16	120412.00	46	166275.78	76	188081.36	106	202530.59	136	213353.89	166	222010.81
	2632.89		934.01		567.71		407.79		318.17		260.84
17	123044.89	47	167209.79	77	188649.07	107	202938.38	137	213672.06	167	222271.65
	2482.36		914.33		560.39		404.00		315.85		259.28
18	125527.25	48	168124.12	78	189209.46	108	203342.38	138	213987.91	168	222530.93
	2348.11		895.49		553.25		400.27		313.57		257.74
19	127875.36	49	169019.61	79	189762.71	109	203742.65	139	214301.48	169	222788.67
	2227.64		877.39		546.28		396.62		311.32		256.22
20	130103.00	50	169897.00	80	190308.99	110	204139.27	140	214612.80	170	223044.89
	2118.93		860.02		539.51		393.03		309.11		254.72
21	132221.93	51	170757.02	81	190848.50	111	204532.30	141	214921.91	171	223299.61
	2020.34		843.31		532.89		389.50		306.92		253.23
22	134242.27	52	171600.33	82	191381.39	112	204921.80	142	215228.83	172	223552.84
	1930.51		827.26		526.42		386.04		304.77		251.77
23	136172.78	53	172427.59	83	191907.81	113	205307.84	143	215533.60	173	223804.61
	1848.34		811.79		520.12		382.65		302.65		250.31
24	138021.12	54	173239.38	84	192427.93	114	205690.49	144	215836.25	174	224054.92
	1772.88		796.89		513.96		379.29		300.55		248.88
25	139794.00	55	174036.27	85	192941.89	115	206069.78	145	216136.80	175	224303.80
	1703.33		782.53		507.96		376.02		298.49		247.47
26	141497.33	56	174818.80	86	193449.85	116	206445.80	146	216435.29	176	224551.27
	1639.05		768.69		502.08		372.79		296.44		246.06
27	143136.38	57	175587.49	87	193951.93	117	206818.59	147	216731.73	177	224797.33
	1579.42		755.31		496.34		369.61		294.44		244.67
28	144715.80	58	176342.80	88	194448.27	118	207188.20	148	217026.17	178	225042.00
	1524.00		742.40		490.73		366.50		292.46		243.30
29	146239.80	59	177085.20	89	194939.00	119	207554.70	149	217318.63	179	225285.30
	1472.33		729.93		485.25		363.42		290.50		241.95
30	147712.13	60	177815.13	90	195424.25	120	207918.12	150	217609.13	180	225527.25

Chilias Numerorum absolutorum ab Vnitate vsq; ad 10000, cum eorum Logarithmis, ac differentijs.

Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.
180	225527.25	210	232221.93	240	238021.12	270	243136.38	300	247712.13	330	251851.39
	240.61		206.32		180.58		160.55		144.52		131.41
181	225767.86	211	232428.25	241	238201.70	271	243296.93	301	247856.65	331	251982.80
	239.28		205.34		179.84		159.96		144.04		131.01
182	226007.14	212	232633.59	242	238381.54	272	243456.89	302	248000.69	332	252113.81
	237.97		204.37		179.09		159.37		143.57		130.61
183	226245.11	213	232837.96	243	238560.63	273	243616.26	303	248144.26	333	252244.42
	236.67		203.42		178.35		158.80		143.10		130.23
184	226481.78	214	233041.38	244	238738.98	274	243775.06	304	248287.36	334	252374.65
	235.39		202.47		177.63		158.21		142.62		129.83
185	226717.17	215	233243.85	245	238916.61	275	243933.27	305	248429.98	335	252504.48
	234.12		201.51		176.90		157.64		142.16		129.45
186	226951.29	216	233445.38	246	239093.51	276	244090.91	306	248572.14	336	252633.93
	232.87		200.59		176.19		157.07		141.70		129.06
187	227184.16	217	233645.97	247	239269.70	277	244247.98	307	248713.84	337	252762.99
	231.62		199.68		175.47		156.50		141.23		128.68
188	227415.78	218	233845.65	248	239445.17	278	244404.48	308	248855.07	338	252891.67
	230.40		198.76		174.76		155.94		140.78		128.30
189	227646.18	219	234044.41	249	239619.93	279	244560.42	309	248995.85	339	253019.97
	229.18		197.86		174.07		155.38		140.32		127.92
190	227875.36	220	234242.27	250	239794.00	280	244715.80	310	249136.17	340	253147.89
	227.98		196.96		173.37		154.83		139.87		127.55
191	228103.34	221	234439.23	251	239967.37	281	244870.63	311	249276.04	341	253275.44
	226.78		196.07		172.68		154.28		139.42		127.17
192	228330.12	222	234635.30	252	240140.05	282	245024.91	312	249415.46	342	253402.61
	225.61		195.19		172.00		153.73		138.97		126.80
193	228555.73	223	234830.49	253	240312.05	283	245178.64	313	249554.43	343	253529.41
	224.44		194.31		171.32		153.19		138.53		126.43
194	228780.17	224	235024.80	254	240483.37	284	245331.83	314	249692.96	344	253655.84
	223.29		193.45		170.64		152.66		138.10		126.07
195	229003.46	225	235218.25	255	240654.01	285	245484.49	315	249831.06	345	253781.91
	222.15		192.59		169.99		152.11		137.65		125.70
196	229225.61	226	235410.84	256	240824.00	286	245636.60	316	249968.71	346	253907.61
	221.01		191.75		169.31		151.59		137.22		125.34
197	229446.62	227	235602.59	257	240993.31	287	245788.19	317	240105.93	347	254032.95
	219.90		190.89		168.66		151.06		136.78		124.97
198	229666.52	228	235793.48	258	241161.97	288	245939.25	318	250242.71	348	254157.92
	218.79		190.07		168.01		150.53		136.36		124.62
199	229885.31	229	235983.55	259	241329.98	289	246089.78	319	250379.07	349	254282.54
	217.69		189.23		167.35		150.02		135.93		124.26
200	230103.00	230	236172.78	260	241497.33	290	246239.80	320	250515.00	350	254406.80
	216.61		188.42		166.72		149.50		135.50		123.91
201	230319.61	231	236361.20	261	241664.05	291	246389.30	321	250650.50	351	254530.71
	215.53		187.60		166.08		148.99		135.09		123.56
202	230535.14	232	236548.80	262	241830.13	292	246538.29	322	250785.59	352	254654.27
	214.46		186.79		165.44		148.47		134.66		123.20
203	230749.60	233	236735.59	263	241995.57	293	246686.76	323	250920.25	353	254777.47
	213.42		186.00		164.82		147.97		134.25		122.86
204	230963.02	234	236921.59	264	242160.39	294	246834.73	324	251054.50	354	254900.33
	212.37		185.20		164.20		147.47		133.94		122.51
205	231175.39	235	237106.79	265	242324.59	295	246982.20	325	251188.34	355	255022.84
	211.33		184.41		163.57		146.97		133.42		122.16
206	231386.72	236	237291.20	266	242488.16	296	247129.17	326	251321.76	356	255145.00
	210.31		183.63		162.97		146.47		133.02		121.82
207	231597.03	237	237474.83	267	242651.13	297	247275.64	327	251454.78	357	255266.82
	209.30		182.87		162.35		145.99		132.60		121.48
208	231806.33	238	237657.70	268	242813.48	298	247421.63	328	251587.38	358	255388.30
	208.30		182.09		161.75		145.49		132.21		121.14
209	232014.63	239	237839.79	269	242975.23	299	247567.12	329	251719.59	359	255509.44
	207.30		181.33		161.15		145.01		131.80		120.81
210	232221.93	240	238021.12	270	243136.38	300	247712.13	330	251851.39	360	255630.25

Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.
360	255630.25	390	259106.46	420	262324.93	450	265321.25	480	268124.12	510	270757.02
	120.47		111.22		103.28		96.40		90.39		85.07
361	255750.72	391	259217.68	421	262428.21	451	265417.65	481	268214.51	511	270842.09
	120.14		110.93		103.04		96.19		90.19		84.91
362	255870.86	392	259328.61	422	262531.25	452	265513.84	482	268304.70	512	270927.00
	119.80		110.65		102.79		95.98		90.01		84.74
363	255990.66	393	259439.26	423	262634.04	453	265609.82	483	268394.71	513	271011.74
	119.48		110.36		102.55		95.77		89.83		84.57
364	256110.14	394	259549.62	424	262736.59	454	265705.59	484	268484.54	514	271096.31
	119.15		110.09		102.30		95.55		89.63		84.41
365	256229.29	395	259659.71	425	262838.89	455	265801.14	485	268574.17	515	271180.72
	118.82		109.81		102.07		95.34		89.46		84.25
366	256348.11	396	259769.52	426	262940.96	456	265896.48	486	268663.63	516	271264.97
	118.50		109.53		101.83		95.14		89.27		84.08
367	256466.61	397	259879.05	427	263042.79	457	265991.62	487	268752.90	517	271349.05
	118.17		109.26		101.59		94.93		89.08		83.93
368	256584.78	398	259988.31	428	263144.38	458	266086.55	488	268841.98	518	271432.98
	117.85		108.98		101.35		94.72		88.91		83.76
369	256702.63	399	260097.29	429	263245.73	459	266181.27	489	268930.89	519	271516.74
	117.54		108.71		101.12		94.51		88.72		83.59
370	256820.17	400	260206.00	430	263346.85	460	266275.78	490	269019.61	520	271600.33
	117.22		108.44		100.88		94.31		88.54		83.44
371	256937.39	401	260314.44	431	263447.73	461	266370.09	491	269108.15	521	271683.77
	116.90		108.17		100.64		94.11		88.36		83.28
372	257054.29	402	260422.61	432	263548.37	462	266464.20	492	269196.51	522	271767.05
	116.59		107.89		100.42		93.90		88.18		83.12
373	257170.88	403	260530.50	433	263648.79	463	266558.10	493	269284.69	523	271850.17
	116.28		107.64		100.18		93.70		88.00		82.96
374	257287.16	404	260638.14	434	263748.97	464	266651.80	494	269372.69	524	271933.13
	115.97		107.36		99.96		93.50		87.83		82.80
375	257403.13	405	260745.50	435	263848.93	465	266745.30	495	269460.52	525	272015.93
	115.65		107.10		99.72		93.29		87.65		82.64
376	257518.78	406	260852.60	436	263948.65	466	266838.59	496	269548.17	526	272098.57
	115.36		106.84		99.49		93.10		87.47		82.49
377	257634.14	407	260959.44	437	264048.14	467	266931.69	497	269635.64	527	272181.06
	115.04		106.58		99.27		92.90		87.29		82.33
378	257749.18	408	261066.02	438	264147.41	468	267024.59	498	269722.93	528	272263.39
	114.74		106.31		99.04		92.69		87.12		82.18
379	257863.92	409	261172.33	439	264246.45	469	267117.28	499	269810.05	529	272345.57
	114.44		106.06		98.82		92.51		86.95		82.02
380	257978.36	410	261278.39	440	264345.27	470	267209.79	500	269897.00	530	272427.59
	114.14		105.79		98.59		92.30		86.77		81.86
381	258092.50	411	261384.18	441	264443.86	471	267302.09	501	269983.77	531	272509.45
	113.84		105.54		98.37		92.11		86.60		81.71
382	258206.34	412	261489.72	442	264542.23	472	267394.20	502	270070.37	532	272591.16
	113.54		105.29		98.14		91.91		86.43		81.56
383	258319.88	413	261595.01	443	264640.37	473	267486.11	503	270156.80	533	272672.72
	113.24		105.03		97.93		91.72		86.25		81.41
384	258433.12	414	261700.03	444	264738.30	474	267577.83	504	270243.05	534	272754.13
	112.95		104.78		97.70		91.53		86.09		81.25
385	258546.07	415	261804.81	445	264836.00	475	267669.36	505	270329.14	535	272835.38
	112.66		104.52		97.49		91.34		85.91		81.10
386	258658.73	416	261909.33	446	264933.49	476	267760.70	506	270415.05	536	272916.48
	112.37		104.28		97.26		91.14		85.75		80.95
387	258771.10	417	262013.61	447	265030.75	477	267851.84	507	270500.80	537	272997.43
	112.07		104.02		97.05		90.95		85.57		80.80
388	258883.17	418	262117.63	448	265127.80	478	267942.79	508	270586.37	538	273078.23
	111.79		103.77		96.83		90.76		85.41		80.65
389	258994.96	419	262221.40	449	265224.63	479	268033.55	509	270671.78	539	273158.88
	111.50		103.53		96.62		90.57		85.24		80.50
390	259106.46	420	262324.93	450	265321.25	480	268124.12	510	270757.02	540	273239.38

Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.
540	273239.38	570	275587.49	600	277815.13	630	279934.05	660	281954.39	690	283884.91
	80.35		76.12		72.32		68.89		65.76		62.89
541	273319.73	571	275663.61	601	277887.45	631	280002.94	661	282020.15	691	283947.80
	80.20		75.99		72.20		68.77		65.65		62.81
542	273399.93	572	275739.60	602	277959.65	632	280071.71	662	282085.80	692	284010.61
	80.05		75.86		72.08		68.66		65.55		62.71
543	273479.98	573	275815.46	603	278031.73	633	280140.37	663	282151.35	693	284073.32
	79.91		75.73		71.96		68.56		65.46		62.63
544	273559.89	574	275891.19	604	278103.69	634	280208.93	664	282216.81	694	284135.95
	79.76		75.59		71.85		68.45		65.35		62.53
545	273639.65	575	275966.78	605	278175.54	635	280277.37	665	282282.16	695	284198.48
	79.61		75.47		71.72		68.34		65.26		62.44
546	273719.26	576	276042.25	606	278247.26	636	280345 71	666	282347.42	696	284260.92
	79.47		75.33		71.61		68.23		65.16		62.36
547	273798.73	577	276117.58	607	278318.87	637	280413.94	667	282412.58	697	284323.28
	79.33		75.20		71.49		68.13		65.07		62.26
548	273878.06	578	276192.78	608	278390.36	638	280482.07	668	282477.65	698	284385.54
	79.17		75.08		71.37		68.02		64.96		62.18
549	273957.23	579	276267.86	609	278461.73	639	280550.09	669	282542.61	699	284447.72
	79.04		74.94		71.25		67.91		64.87		62.08
550	274036.27	580	276342.80	610	278532.98	640	280618.00	670	282607.48	700	284509.80
	78.89		74.81		71.14		67.80		64.77		61.00
551	274115.16	581	276417.61	611	278604.12	641	280685.80	671	282672.25	701	284571.80
	78.75		74.69		71.02		67.70		64.68		61.91
552	274193.91	582	276492.30	612	278675.14	642	280753.50	672	282736.93	702	284633.71
	78.60		74.56		70 91		67.60		64.58		61.82
553	274272.51	583	276566.86	613	278746.05	643	280821.10	673	282801.51	703	284695.53
	78.47		74.42		70.79		67.49		64.48		61.74
554	274350.98	584	276641.28	614	278816.84	644	280888.59	674	282865.99	704	284757.27
	78.32		74.31		70.67		67.38		64.39		61.64
555	274429.30	585	276715.59	615	278887.51	645	280955.97	675	282930.38	705	284818.91
	78.18		74.17		70.56		67.28		64.29		61.56
556	274507.48	586	276789.76	616	278958.07	646	281023.25	676	282994.67	706	284880.47
	78.04		74.05		70.45		67.18		64.20		61.47
557	274585.52	587	276863.81	617	279028.52	647	281090.43	677	283058.87	707	284941.94
	77.90		73.92		70.33		67.07		64.10		61.39
558	274663.42	588	276937.73	618	279098.85	648	281157.50	678	283122.97	708	285003.33
	77.76		73.80		70.21		66.97		64.01		61.29
559	274741.18	589	277011.53	619	279169.06	649	281224.47	679	283186.98	709	285064.62
	77.62		73.67		70.11		66.87		63.91		61.21
560	274818.80	590	277085.20	620	279239.17	650	281291.34	680	283250.89	710	285125.83
	77.49		73.55		69.99		66.76		63.82		61.13
561	274896.29	591	277158.75	621	279309.16	651	281358.10	681	283314.71	711	285186.96
	77.34		73.42		69.88		66.66		63.73		61.04
562	274973.63	592	277232.17	622	279379.04	652	281424.76	682	283378.44	712	285248.00
	77.21		73.30		69.76		66.56		63.63		60.95
563	275050.84	593	277305.47	623	279448.80	653	281491.32	683	283442.07	713	285308.95
	77.07		73.17		69.66		66.45		63.54		60.87
564	275127.91	594	277378.64	624	279518.46	654	281557.77	684	283505.61	714	285369.82
	76.93		73.06		69.54		66.36		63.45		60.78
565	275204.84	595	277451.70	625	279588.00	655	281624.13	685	283569.06	715	285430.60
	76.80		72.93		69.43		66.25		63.35		60.70
566	275281.64	596	277524.63	626	279657.43	656	281690.38	686	283632.41	716	285491.30
	76.67		72.80		69.32		66.16		63.26		60.62
567	275358.31	597	277597.43	627	279726.75	657	281756.54	687	283695.67	717	285551.92
	76.52		72.69		69.21		66.05		63.17		60.52
568	275434.83	598	277670.12	628	279795.96	658	281822.59	688	283758.84	718	285612.44
	76.40		72.56		69.10		65.95		63.08		60.45
569	275511.23	599	277742.68	629	279865.06	659	281888.54	689	283821.92	719	285672.89
	76.26		72.45		68.99		65.85		62.99		60.36
570	275587.49	600	277815.13	630	279934.05	660	281954.39	690	283884.91	720	285733.25

Chilias Numerorum ab Vnitate vsq; ad 1000, cum eorum Logarithmis ac differentijs.

Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.
720	285733.25	750	287506.13	780	289209.46	810	290848.50	840	292427.93	870	293951.93
	60.28		57.86		55.64		53.59		51.67		49.89
721	285793.53	751	287563.99	781	289265.10	811	290902.09	841	292479.60	871	294001.82
	60.19		57.79		55.58		53.51		51.61		49.83
722	285853.72	752	287621.78	782	289320.68	812	290955.60	842	292531.21	872	294051.65
	60.11		57.72		55.50		53.45		51.55		49.77
723	285913.83	753	287679.50	783	289376.18	813	291009.05	843	292582.76	873	294101.42
	60.03		57.63		55.43		53.39		51.48		49.72
724	285973.86	754	287737.13	784	289431.61	814	291062.44	844	292634.24	874	294151.14
	59.94		57.57		55.36		53.32		51.43		49.67
725	286033.80	755	287794.70	785	289486.97	815	291115.76	845	292685.67	875	294200.81
	59.86		57.48		55.28		53.26		51.37		49.60
726	286093.66	756	287852.18	786	289542.25	816	291169.02	846	292737.04	876	294250.41
	59.78		57.41		55.22		53.19		51.30		49.55
727	286153.44	757	287909.59	787	289597.47	817	291222.21	847	292788.34	877	294299.96
	59.70		57.33		55.15		53.12		51.25		49.49
728	286213.14	758	287966.92	788	289652.62	818	291275.33	848	292839.59	878	294349.45
	59.61		57.26		55.08		53.06		51.18		49.44
729	286272.75	759	288024.18	789	289707.70	819	291328.39	849	292890.77	879	294398.89
	59.54		57.18		55.01		53.00		51.12		49.38
730	286332.29	760	288081.36	790	289762.71	820	291381.39	850	292941.89	880	294448.27
	59.45		57.11		54.94		52.93		51.07		49.32
731	286391.74	761	288138.47	791	289817.65	821	291434.32	851	292992.96	881	294497.59
	59.37		57.03		54.87		52.86		51.00		49.27
732	286451.11	762	288195.50	792	289872.52	822	291487.18	852	293043.96	882	294546.86
	59.29		56.95		54.80		52.80		51.94		49.21
733	286510.40	763	288252.45	793	289927.32	823	291539.98	853	293094.90	883	294596.07
	59.21		56.89		54.73		52.74		50.89		49.16
734	286569.61	764	288309.34	794	289982.05	824	291592.72	854	293145.79	884	294645.23
	59.12		56.80		54.66		52.67		50.82		49.10
735	286628.73	765	288366.14	795	290036.71	825	291645.39	855	293196.61	885	294694.33
	59.05		56.74		54.60		52.61		50.77		49.04
736	286687.78	766	288422.88	796	290091.31	826	291698.00	856	293247.38	886	294743.37
	58.97		56.66		54.52		52.55		50.70		48.99
737	286746.75	767	288479.54	797	290145.83	827	291750.55	857	293298.08	887	294792.36
	58.89		56.58		54.46		52.48		50.65		48.94
738	286805.64	768	288536.12	798	290200.29	828	291803.03	858	293348.73	888	294841.30
	58.80		56.51		54.39		52.42		50.59		48.88
739	286864.44	769	288592.63	799	290254.68	829	291855.45	859	293399.32	889	294890.18
	58.73		56.44		54.32		52.36		50.53		48.82
740	286923.17	770	288649.07	800	290309.00	830	291907.81	860	293449.85	890	294939.00
	58.65		56.37		54.25		52.29		50.47		48.77
741	286981.82	771	288705.44	801	290363.25	831	291960.10	861	293500.32	891	294987.77
	58.57		56.29		54.19		52.23		50.41		48.72
742	287040.39	772	288761.73	802	290417.44	832	292012.33	862	293550.73	892	295036.49
	58.49		56.22		54.11		52.17		50.35		48.66
743	287098.88	773	288817.95	803	290471.55	833	292064.50	863	293601.08	893	295085.15
	58.41		56.15		54.05		52.11		50.29		48.60
744	287157.29	774	288874.10	804	290525.60	834	292116.61	864	293651.37	894	295133.75
	58.34		56.07		53.99		52.04		50.24		48.55
745	287215.63	775	288930.17	805	290579.59	835	292168.65	865	293701.61	895	295182.30
	58.25		56.00		53.91		51.98		50.18		48.50
746	287273.88	776	288986.17	806	290633.50	836	292220.63	866	293751.79	896	295230.80
	58.18		55.93		53.85		51.92		50.12		48.44
747	287332.06	777	289042.10	807	290687.35	837	292272.55	867	293801.91	897	295279.24
	58.10		55.86		53.79		51.85		50.06		48.39
748	287390.16	778	289097.96	808	290741.14	838	292324.40	868	293851.97	898	295327.63
	58.02		55.79		53.71		51.80		50.01		48.34
749	287448.18	779	289153.75	809	290794.85	839	292376.20	869	293901.98	899	295375.97
	57.95		55.71		53.65		51.73		49.95		48.28
750	287506.13	780	289209.46	810	290848.50	840	292427.93	870	293951.93	900	295424.25

Chilias Numerorum absolutorum ab Vnitate vsq; ad 1000, cum eorum Logarithmis, ac differentijs.

Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.	Nu.	Logarith. cũ differ.
900	295424.25	917	296236.93	934	297034.69	951	297818.05	968	298587.54	985	299343.62
	48.23		47.34		46.47		45.64		44.84		44.07
901	295472.48	918	296284.27	935	297081.16	952	297863.69	969	298632.38	986	299387.69
	48.17		47.28		46.42		45.60		44.79		44.03
902	295520.65	919	296331.55	936	297127.58	953	297909.29	970	298677.17	987	299431.72
	48.12		47.23		46.38		45.55		44.75		43.97
903	295568.77	920	296378.78	937	297173.96	954	297954.84	971	298721.92	988	299475.69
	48.07		47.18		46.32		45.50		44.71		43.94
904	295616.84	921	296425.96	938	297220.28	955	298000.34	972	298766.63	989	299519.63
	48.02		47.13		46.28		45.45		44.65		43.89
905	295664.86	922	296473.09	939	297266.56	956	298045.79	973	298811.28	990	299563.52
	47.96		47.08		46.23		45.40		44.62		43.85
906	295712.82	923	296520.17	940	297312.79	957	298091.19	974	298855.90	991	299607.37
	47.91		47.03		46.17		45.36		44.56		43.80
907	295760.73	924	296567.20	941	297358.96	958	298136.55	975	298900.46	992	299651.17
	47.85		46.97		46.13		45.31		44.52		43.75
908	295808.58	925	296614.17	942	297405.09	959	298181.86	976	298944.98	993	299694.92
	47.81		46.93		46.08		45.26		44.48		43.72
909	295856.39	926	296661.10	943	297451.17	960	298227.12	977	298989.46	994	299738.64
	47.75		46.87		46.03		45.22		44.43		43.67
910	295904.14	927	296707.97	944	297497.20	961	298272.34	978	299033.89	995	299782.31
	47.70		46.83		45.98		45.17		44.38		43.62
911	295951.84	928	296754.80	945	297543.18	962	298317.51	979	299078.27	996	299825.93
	47.64		46.77		45.93		45.12		44.34		43.59
912	295999.48	929	296801.57	946	297589.11	963	298362.63	980	299122.61	997	299869.52
	47.60		46.72		45.89		45.07		44.29		43.53
913	296047.08	930	296848.29	947	297635.00	964	298407.70	981	299166.90	998	299913.05
	47.54		46.68		45.83		45.03		44.25		43.50
914	296094.62	931	296894.97	948	297680.83	965	298452.73	982	299211.15	999	299956.55
	47.49		46.62		45.79		44.98		44.20		43.45
915	296142.11	932	296941.59	949	297726.62	966	298497.71	983	299255.35	1000	300000.00
	47.44		46.57		45.74		44.94		44.16		
916	296189.55	933	296988.16	950	297772.36	967	298542.65	984	299299.51		
	47.38		46.53		45.69		44.89		44.11		
917	296236.93	934	297034.69	951	297818.05	968	298587.54	985	299343.62		

FINIS CHILIADIS.

Facultas Reuerendiſſ. P. Generalis.

CVm Trigonometriam à Reu. P. Bonauentura Caualerio Mediolanenſi Ordinis Ieſuatorum Sancti Hieronymi conſtructam duo eiuſdem Ordinis recognouerint, & typis mandari poſſe iudicauerint: Nos permittimus vt imprimatur; ſi ijs, ad quos ſpectat, ita viſum fuerit.

Bononiæ die 21. Nouembris 1642.

Fr. Io. Paulus ab Hamilitate Generalis.

CVm ego infraſcriptus Librorum Cenſor pro Eminentiſs. & Reuerendiſs. D. D. Principe Card. Columna Bonon. Archiepiſcopo Trigonometriam hanc Adm. Reu. P. Bonauenturæ Caualerij in Almo Bononienſi Archigymnaſio excellentiſs. Mathematicarum Profeſſoris accuratè perluſtraſſem, nihil cenſuræ obnoxium deprehendens, admiratus ſum ſolita tanti, ac incomparabilis viri in hac facultate miracula. Quare eam, quæ ſummum in Mathematicorum commodum publici iuris fiat, digniſſimam cenſeo.

Dat. Bonon. in Collegio noſtro Pœnitent. die 29. Nouemb. An. 1642.

D. Ludouicus Modronus Sac. Bononien. Pœnit. Rect.

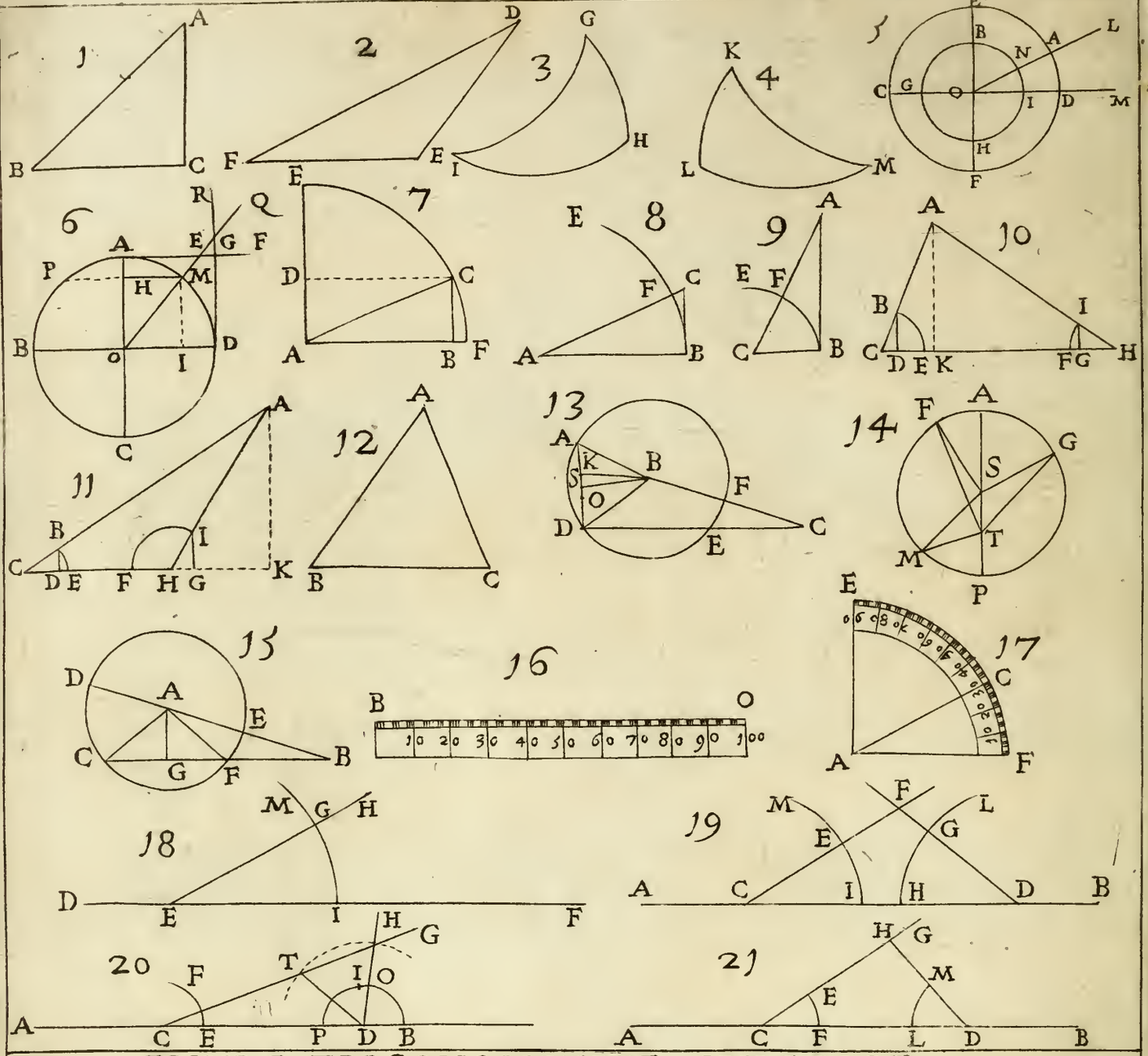
ACcuratè perlegi opus Trigonometriæ compoſitum ab Adm. Reu. P. Bonauentura Caualerio in Almo Bononien. Archigymnaſio Scientiarum Mathematicarum Profeſſore; nihilq; quod Fidei Catholicę, boniſq; moribus repugnet reperi, & ideo dignum typis dari cenſeo.

Ego Frat. Dominicus de Manfredis Doct. Colleg. ac Sanctiſs. Inquiſit. Conſult. pro Reuerendiſſ. P. Inq. Bonon.

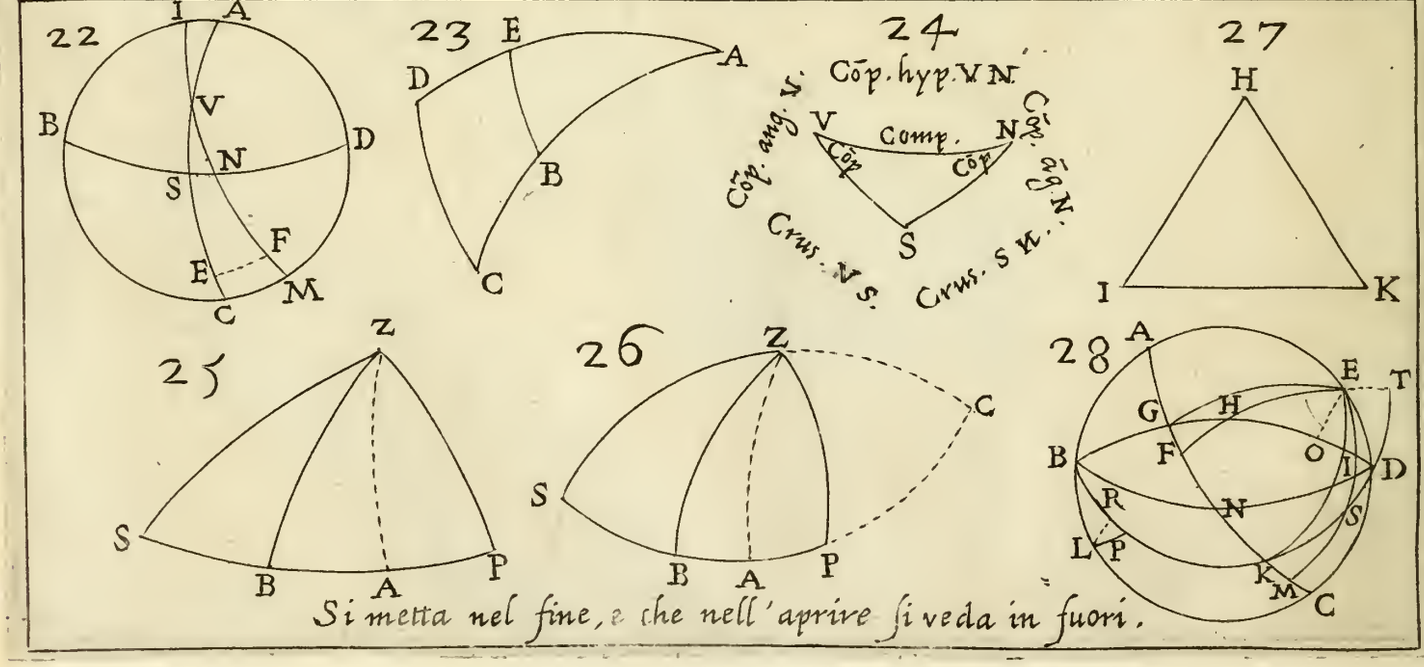
BONONIAE,

Typis Hæredis Victorij Benatij. 1643. *Superiorum permiſſu.*

FIGVRÆ TRIGONOMETRIÆ PLANÆ.



FIGVRÆ TRIGONOMETRIÆ SPHÆRICÆ.



Si metta nel fine, e che nell'aprire si veda in fuori.